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Banque de France Bulletin

Winter 2010-2011

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BANQUE DE FRANCE

EUROSYSTÈME

114-020

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The position of firms in 2009: a decline in business and a reluctance to invest during the crisis

Companies Directorate
Companies Observatory

During the second year of the economic and financial crisis, French firms saw a sharp drop in business, particularly export sales. In 2009, their profit margins hit a ten-year low and the fall in return on operating capital was even greater than the decline seen in 2008.

Net return on equity fell for SMEs and stabilised for larger firms (mid-tier enterprises – MTEs – and large enterprises). The larger firms set aside smaller financial provisions than in 2008, even though cash flow improved slightly.

Personnel expenses decreased much less than total income in 2009, and the decline in the saving rate that started in 2008 continued in 2009. After peaking at 21.4% in 2007, it hit the lowest point in the period under consideration (1996-2009), falling to 16.6%.

Business investment was down sharply by -20% and the investment rate shed 1.7 percentage points to stand at 20% of value added. For SMEs, the investment rate was still weak at around 16%. The rate was still higher for mid-tier enterprises than for the other categories, however, it did decline, echoing the SMEs' investment rate.

Firms responded effectively to the recent crisis. On the whole, they preserved their financial structure, especially in the case of SMEs, which increased their equity and cash holdings on their balance sheets, as short-term financing needs eased and a reluctance to invest prevailed. In contrast, the share of equity on the balance sheets of mid-tier enterprises and large enterprises declined.

This was primarily a consequence of shrinking cash flows and more bond issuance that increased large enterprises' financial debt as market turmoil subsided. The debt ratios of SMEs covered by the Banque de France balance sheet data collection continued to decline as bank borrowing decreased, especially short-term borrowing. The decline in SMEs' bank borrowing is not as straightforward as it looks. If the sample is expanded to include very small enterprises, outstanding loans to SMEs showed much slower growth, but continued to increase nonetheless. Mid-tier enterprises' debt ratios stabilised, once double counting of inter-company loans is eliminated.

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NB: This study is based on the data available in the FIBEN databases of the Banque de France in November 2010. The list and content of the databases can be found in Annex 1. A full statistics file and methodology can be found at: http://www.banque-france.fr/fr/statistiques/economie/economie-entreprises/structures-performancesentreprises.htm.

The following remarks deal with macroeconomic ratios, which may correspond to sharply contrasting situations of individual firms. Some have seen a major deterioration in their positions, as can be seen in the peak of 63,400 business failures in the twelve months to November 2009. Another sign is that 10% of mid-tier companies posted negative return on equity of more than -15% in 2009, as opposed to the average positive return on equity of 8.3% for mid-tier companies.

As of 30 June 2010, the interim earnings reports of the main listed companies showed a large improvement as business gradually picked up after the end of 2009. Their strong international presence means that these companies benefited from strong growth in emerging economies.

Keywords: activity, profitability, debt, investment, SMEs, MTEs.

JEL codes: E22, G30, G33, L23, L25.

1| The widespread decline in activity drove down profit margins

Sales were down sharply, especially export sales

Turnover in all categories combined was down by 8.8% in 2009 and value added was down by 5%. Foreign-owned subsidiaries and large enterprises were hit particularly hard (see Table 1). Export sales were down by 17%, which is twice as large as the decline in total turnover for all firms. Manufacturing was hit hardest, with a decline of 20%.

Table 1 Business in 2009

(%)

	Distribution of value added	2009/2008 change				
		Turnover	Export sales	Value added	Personnel expenses	Gross operating income
By size						
French SMEs	27.3	-5.4	-12.9	-3.6	0.3	-14.8
Foreign-owned SMEs	3.0	-11.5	-15.4	-7.7	-1.4	-25.9
French MTEs	19.0	-7.4	-10.8	-4.2	-0.2	-13.4
Foreign-owned MTEs	11.9	-13.9	-17.9	-7.7	-1.3	-20.0
Large entreprises	38.9	-9.6	-19.2	-5.5	-0.8	-19.0
By sector						
Manufacturing	29.9	-14.8	-20.0	-9.8	-1.2	-33.6
Energy, water, waste	5.8	-4.0	-8.5	-0.6	2.9	-4.0
Construction	9.2	-4.0	-21.9	-0.9	1.9	-9.8
Trade	23.3	-7.1	-12.6	-3.0	1.4	-15.7
Transport and storage	5.5	-7.4	-7.0	-5.2	0.1	-21.8
Hotels and catering	2.5	-0.8	-1.7	-1.4	-0.3	-5.6
Information and communication	9.8	1.7	-14.9	0.7	2.4	-2.1
Real estate	1.9	-2.1	-25.2	1.5	-1.5	2.2
Business services	11.2	-7.1	-10.1	-8.2	-5.8	-20.2
Personal services	1.0	-1.0	-9.9	0.5	1.5	-3.5
Total	**100.0**	**-8.8**	**-16.7**	**-5.0**	**-0.4**	**-17.1**

Scope: Non-financial firms, as defined by the Economic Modernisation Act, having filed balance sheets in 2008 and 2009.

Explanatory note: changes in the tables are calculated for a sample of enterprises that report data for both 2008 and 2009 (sliding sample). This is not the case for the ratios shown in the charts, which are calculated for each year using all of the available balance sheets.

Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

Table 2 Exporting firms in 2009

(%)

	Distribution of exports	Percentage of exporting firms	Export rates of exporting firms (% of turnover)
By size			
French SMEs	10.6	28.5	20.2
Foreign-owned SMEs	4.6	74.8	31.4
French MTEs	18.4	67.9	26.1
Foreign-owned MTEs	20.0	89.2	31.7
Large entreprises	46.5	94.6	29.5
By sector			
Manufacturing	59.9	58.3	37.9
Energy, water, waste	4.0	30.0	19.8
Construction	1.2	6.8	14.5
Trade	19.4	34.6	15.8
Transport and storage	7.8	44.1	49.8
Hotels and catering	0.2	4.7	19.6
Information and communication	2.5	56.8	19.7
Real estate	0.0	3.7	23.6
Business services	4.8	32.2	27.3
Personal services	0.1	21.5	6.0
Total	**100.0**	**31.6**	**27.9**

Scope: Non-financial firms, as defined by the Economic Modernisation Act, having filed balance sheets in 2008 and 2009.

Explanatory note: changes in the tables are calculated for a sample of enterprises that report data for both 2008 and 2009 (sliding sample). This is not the case for the ratios shown in the charts, which are calculated for each year using all of the available balance sheets.

Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

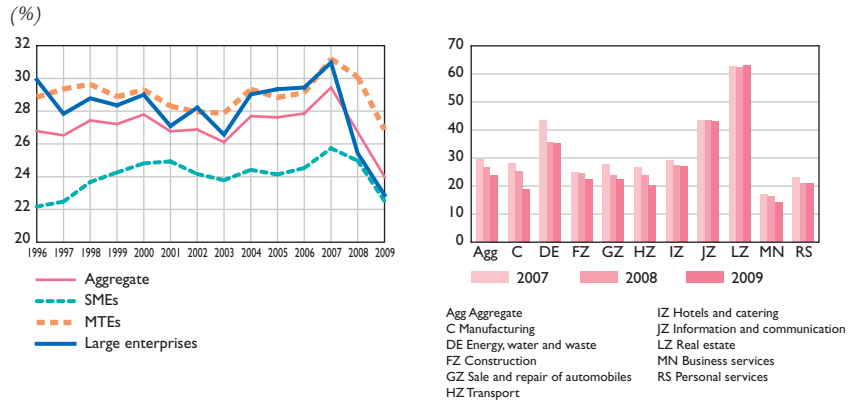
The export ratio of exporting firms was down by 1.6 percentage points to 28%[1] in 2009 (see Table 2). Nearly one third of firms reported export sales. The exporting firms are mostly mid-tier enterprises, large enterprises and foreign-owned subsidiaries. Manufacturing and transport account for nearly 80% of the total.

Profit margins were at a ten-year low

As their business dropped off, firms adjusted their headcounts,starting with temporary personnel. The cost of temporary employees was down by 11.5% (-16% in manufacturing and -13% in construction). For large enterprises this cost was only 7.6% of total personnel expenditure in 2009, after peaking at 9.3% in 2005. The adjustment of permanent staff following the crisis was more moderate, with a cut of only 2%.

1 *The export rate for all enterprises stood at 17% in 2009.*

Chart 1 Profit margin: gross operating income/value added



Scope: Non-financial enterprises, as defined by the Economic Modernisation Act.
Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

The combined effects of the decline in value added and virtually stable wage costs[2] contributed a great deal to the sharp decline in gross operating income, which was down by -17% overall and by -33% in manufacturing.

As was the case in 2008, profit margins shed 2.7 percentage points, falling to 24%. This represented a ten-year low. The drop was the sharpest in manufacturing. The profit margins of large enterprises were comparable to those of SMEs in 2009, whereas, in 2007, the differential in their favour was greater than 5 percentage points (see Chart 1).

This decline is confirmed by the firms' consolidated financial statements: the operating profit margin shrank by 0.7 percentage points, as was the case in 2008 (operating income/turnover).[3]

2| Return on operating capital invested fell, whereas return on equity was less affected

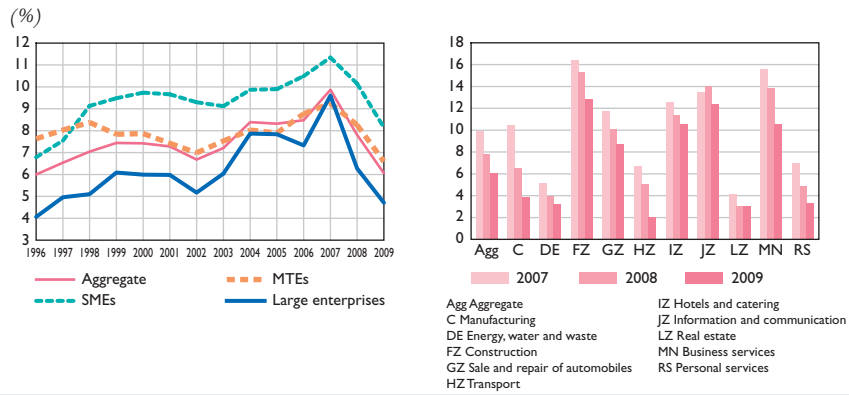
Return on operating capital fell for the second year in a row

The fresh fall in net return on operating capital affected firms of all sizes and in all sectors. Standing at slightly more than 6% for all firms, return on operating capital has fallen by nearly 4 percentage points from its peak

2 *Excluding charges for external personnel. In previous studies by the Observatory, this item was included in personnel expenses. With no temporary employees corresponding to such charges for external personne, it was deemed preferable to exclude these expenses from personnel and report them under other external expenses.*

3 *The consolidated financial statements encompass more than the parent company financial statements and include foreign subsidiaries. This means that the consolidated financial statements of large enterprises cover very international businesses.*

Chart 2 Return on operating capital: net operating income/operating capital



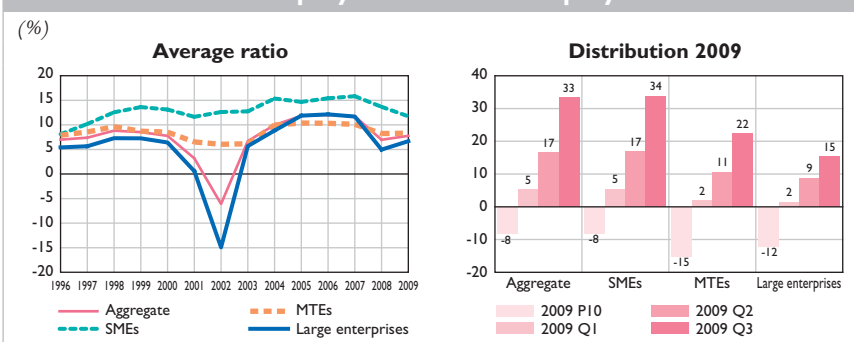
in 2007. Manufacturing, construction, transport and business services posted the biggest falls in 2009 (see Chart 2).

Large enterprises' return on equity stabilised in 2009

Net return on equity posted a further decline for SMEs, falling by 2 percentage points to 11.7% (see Chart 3). It was stable at 8.3% for mid-tier enterprises and posted a slight increase to 6.7% in 2009 for large enterprises.

The distribution of this ratio shows that the fairly positive image given by the average ratio is not so straightforward. A significant proportion of firms posted very negative returns, leading to an increase in business failures in 2009 (see Box 1). This means that 10% of all firms posted negative returns on equity of below -8% in 2009 (versus negative returns of below -4% in 2008) and 10% of mid-tier enterprises posted negative returns on equity in excess of below -15%. On the other hand, 10% of SMEs posted positive returns on equity in excess of 34%.

Chart 3 Return on equity: net cash flow /equity



Scope: Non-financial firms, as defined by the Economic Modernisation Act.
Explanatory note: The distribution in Chart 3 does not include enterprises with no equity or negative equity (10,000 enterprises in 2009. P10, Q1, Q2 and Q3 are statistical dispersion indicators.
Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

Box 1

Business failures and their economic impact

Business failures peaked in November 2009.

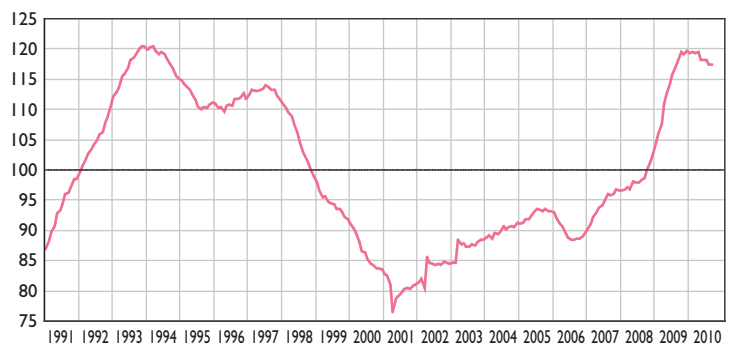
Bankruptcy proceedings were started for 63,400 firms in 2009, which represents an increase of 14% over 2008. The number of business failures over the twelve months peaked in November 2009, reaching 63,500. This is very close to the peak of 64,000 failures reached in October 1993.

SMEs accounted for more than 90% of business failures. Failures of the largest SMEs rose much more than failures of micro-enterprises and enterprises of unknown size in 2009. The increase for the largest SMEs was +44%, as opposed to +13% for micro-enterprises and enterprises of unknown size, but the latter still accounted for 80% of the total.

The trend started to improve in 2010. The growth of business failures slowed down in the first eight months, and the numbers even started to decrease at the end of August 2010. The slower growth of SME business failures primarily concerns the largest SMEs, which were the hardest hit in 2009.

Business failures index

(12-month total – 100 = average from Dec. 90 to Aug. 10)



Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

The share of bank loans affected by SME business failures stood at 1.4% in 2009.

Over the year as a whole, bank loans to failed businesses stood at EUR 4.3 billion in 2009. As measured by their share of outstanding loans to failed businesses over the last twelve months, the impact of SME business failures continued to increase in 2009. SMEs' share increased from 1.0% in 2008 to 1.4% in 2009. The share of outstanding loans affected by the largest SMEs' business failures started to decrease in October 2009 and the share affected by the smallest SMEs' business failures started to decline more slightly in December 2009. This decline continued in 2010.

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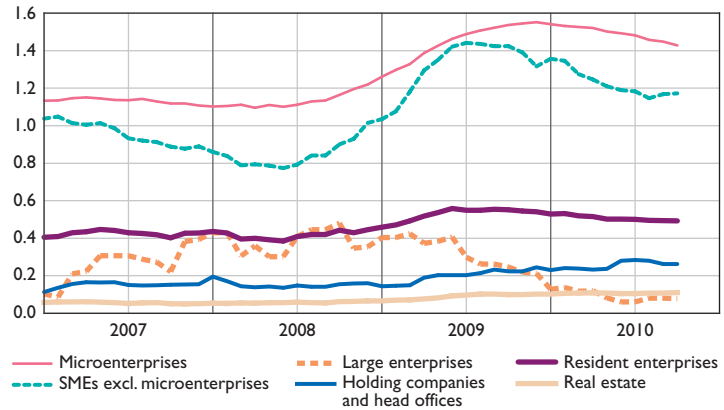
Share of outstanding loans affected by business failures

(cumulative rate over previous 12 months)



Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

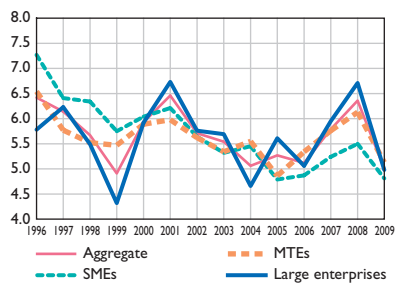
Return on equity in 2009 depended on return on operating capital, which was falling, as well as on non-operating income, and income from financial transactions in particular.

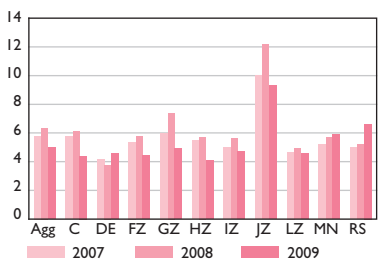
• Non-operating income shrank, particularly as financial income from equity investments declined.

• At the same time financial expenses decreased. A drop of 1.4 percentage points in the apparent cost of borrowing offset the increases in the two previous years (see Chart 4).

Chart 4 Apparent cost of borrowing: financial expense/financial debt

(%)

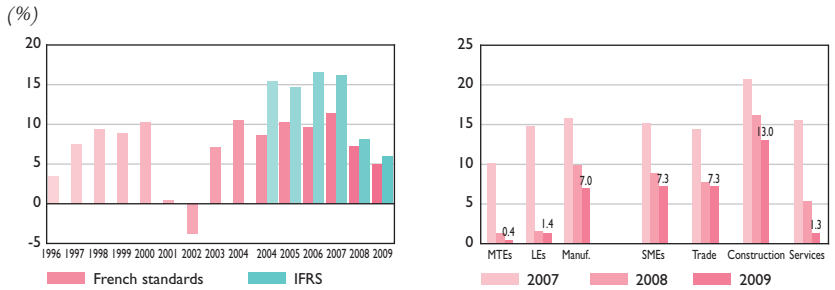




Agg Aggregate
C Manufacturing
DE Energy, water and waste
FZ Construction
GZ Sale and repair of automobiles
HZ Transport
IZ Hotels and catering
JZ Information and communication
LZ Real estate
MN Business services
RS Personal services

Scope: Non-financial enterprises, as defined by the Economic Modernisation Act.
Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

Chart 5 Group share of net income/group share of equity



Scope: Non-financial enterprises, as defined by the Economic Modernisation Act.
Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

• Furthermore, the 2008 financial statements included major allocations to financial provisions. As financial markets gradually calmed down, large enterprises' allocations to provisions fell off sharply in 2009 and some provisions were even written back. Under these conditions the net cash flow increased.

The consolidated net return on equity of firms declined more slowly than in 2008 to slightly less than 6%, compared to 8% in 2008 and 15% two years before that. In the last two years, the decline was severe for service companies, as well as for mid-tier enterprises. The largest enterprises withstood the crisis best, with a net return of 7% in 2009. Overall return was still positive, which was not the case in the early part of the decade, when the internet bubble burst (see Chart 5).

Listed companies' earnings recovered in the first half of 2010

The interim financial statements show that the main non-financial companies listed on the stock market posted a recovery in their business in the first half of 2010. Their total turnover increased by 8.5% and their net income was up by 44%.[4] The biggest improvements were in the manufacturing, construction, energy and environment sectors. These improvements stemmed largely from the catching-up process after the crisis, especially in the manufacturing sector. They were largely driven by the dynamic growth of emerging countries.

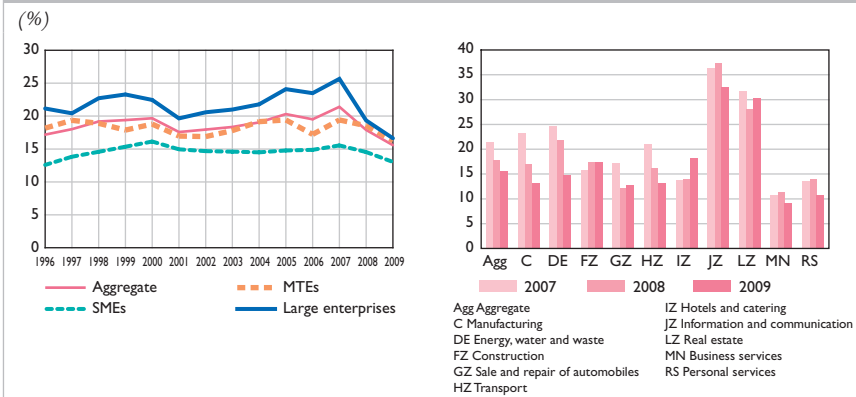
3| Savings and investment declined

The distribution of total income is not favourable to savings

Total income, which is made up of value added plus all of the non-operating income received by the firm, declined by 7.9%. Staff costs decreased much

4 *From the analysis of the financial statements of 71 companies listed on EURONEXT (see Durand* et al. *– 2010).*

Chart 6 Saving rate: cash flow/total income



Scope: Non-financial firms, as defined by the Economic Modernisation Act.
Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

less than total income in 2009, meaning that the share of total income spent on employees rose by 5 percentage points to 52% (compensation and profit sharing). Interest paid to lenders decreased as interest rates and debt levels fell. Income distributed to shareholders as dividends also decreased, in contrast to the pattern seen in 2008. The share of income paid to the government as taxes was stable. All in all, savings, which is the share of total income that the firm keeps, shrank by more than 20% in 2009. This led to the lowest saving rate during the period under review. Saving rates declined sharply for large enterprises in particular, with a drop of nearly 10 percentage points compared to 2007. The gains made by all categories of enterprises over the previous ten years were wiped out (see Chart 6).

A sharp drop in investment in 2009

Business investment fell by 20% in a difficult and uncertain economic environment. This decline matched the contraction of savings. Some 16% of SMEs investment is financed by means of financial leasing. The biggest users of this type of financing are still the construction and transport sectors (see Table 3).

The investment rate shed 1.7 points in 2009, falling to 20.3% of value added. The rate for all enterprises fell close to its 2003 level. It was significantly lower for SMEs, at 16% of value added.[5] The investment rate was more volatile for large enterprises and mid-tier enterprises. The small number of such enterprises and the impact of certain restructuring operations may have influenced the rate. Mid-tier enterprises had posted the highest investment rate of all categories of enterprises since 2004. Their investment

5 *The investment rate is higher compared to the study published in September because it includes purchases made with financial leases and because of a change in the methodology for calculating value added, which includes expenses for external personnel and is consequently lower than before, when such expenses were included in personnel expenses.*

Table 3 Business investment in 2009

(%)

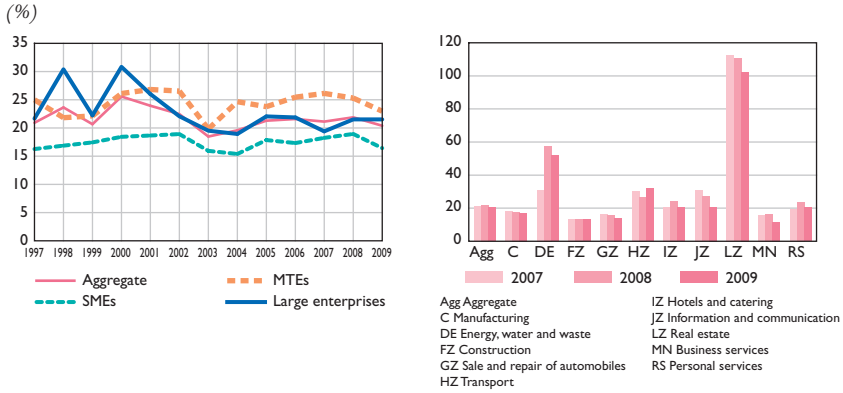
	Distribution of investment	Share financed with financial leases	Charge in investment
By size			
French SMEs	22.6	15.9	-20.7
Foreign-owned SMEs	3.0	5.1	-34.5
French MTEs	22.7	7.1	-12.8
Foreign-owned MTEs	12.8	4.9	-33.1
Large entreprises	38.8	0.3	-16.1
By sector			
Manufacturing	27.6	6.6	-19.4
Energy, water, waste	16.3	1.3	-14.7
Construction	5.6	14.1	-14.8
Trade	17.3	6.8	-20.1
Transport and storage	7.9	15.8	-19.8
Hotels and catering	2.5	3.7	-24.6
Information and communication	6.0	-0.5	-24.3
Real estate	8.5	2.1	-20.0
Business services	7.2	8.2	-27.5
Personal services	1.0	1.4	-21.7
Total	**100.0**	**6.1**	**-19.8**

Scope: Non-financial firms, as defined by the Economic Modernisation Act.
Explanatory note: see Tables 1 and 2.
Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

rate fell sharply in 2009, bringing it into line with the investment rate of large enterprises (see Chart 7).

Chart 7 Business investment including investment financed with financial leases/value added

(%)



Scope: Non-financial firms, as defined by the Economic Modernisation Act.
Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

4| Increase in cash reserves and stabilisation of equity

Working capital requirements decreased

Working capital requirements were down by 9.8%. There was a significant decrease in trade and manufacturing. After the Economic Modernisation Act became law in 2009, trade credit[6] in the manufacturing sector dropped by -12.4%. Customer and supplier payments were much faster for SMEs and MTEs. Slower economic growth led to a contraction of inventories, especially in the manufacturing and trade sectors (see Table 4).

Table 4 Working capital requirement and its components

(%)

	Distribution of working capital requirements	2009/2008 change		
		Working capital requirements	Of which trade credit	Of which inventories
By size				
French SMEs	38.8	-5.3	0.3	-4.1
Foreign-owned SMEs	5.9	-18.6	-19.6	-10.4
French MTEs	29.2	-7.2	4.3	-4.9
Foreign-owned MTEs	16.8	-19.2	-16.1	-10.8
Large entreprises	9.2	-10.3	-28.6**	-6.2
By sector				
Manufacturing	57.8	-9.4	-12.4	-7.3
Energy, water, waste	3.1	-15.4	0.4	0.8
Construction	2.8	25.8	15.0	-5.5
Trade	33.1	-9.4	-11.3**	-6.2
Transport and storage	1.0	-1.5	-5.3	5.3
Hotels and catering	-1.5	2.8*	9.6**	-11.4
Information and communication	-1.9	67.9*	13.8	-0.5
Real estate	3.4	-7.8	19.3	-9.8
Business services	2.8	-9.9	-2.2	-3.0
Personal services	-0.5	-4.2*	-0.3	0.2
Total	**100.0**	**-9.8**	**7.8**	**-6.1**

Scope: Non-financial firms, as defined by the Economic Modernisation Act, having filed balance sheets in 2008 and 2009.

Explanatory note: see Tables 1 and 2.

**Working capital requirements are negative in hotels and catering, information-communication and "other services": it is actually a financing resource for the enterprise. In this case, a positive change is seen as an increase in this resource and a negative change is seen as a decrease.*

***For large enterprises in the trade and hotels and catering sectors, trade credit is negative: it is a financing resource for the enterprise, because payables to suppliers are greater than customer receivables. In this case a positive change is seen as an increase in net financing from suppliers (increase in trade receivables and/or decrease in trade payables), and a negative change is seen as a decrease in net financing.*

Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

6 *Trade credit is the difference between trade receivables and trade payables.*

The working capital requirement compared to turnover and expressed as a number of days, increased by one day nonetheless, primarily in large enterprises. On the other hand, it decreased by one day for SMEs and by two days for MTEs.

Increase in cash reserves

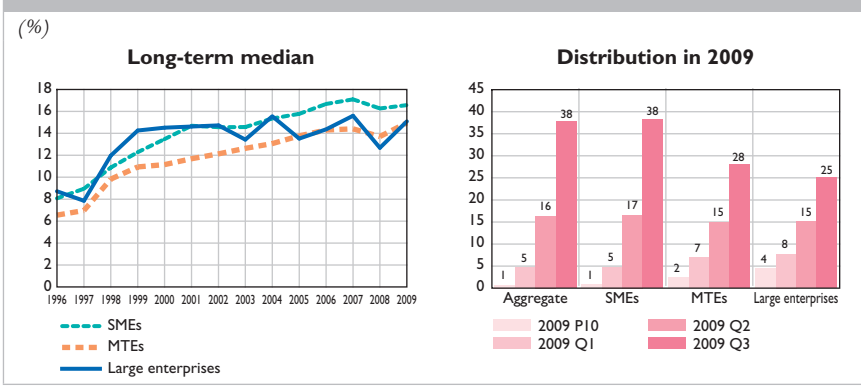
Cash reserves on balance sheets increased by nearly 5% in 2009[7] to account for an average of 13% of assets in 2009. This proportion is much higher for smaller enterprises than for larger enterprises, standing at nearly 20% for SMEs, 14% for MTEs and 11% for large enterprises. There is much greater dispersion of the percentages for SMEs than for the other two categories: for 10% of SMEs, the proportion of cash reserves in assets is less than 1%, whereas it is greater than 38% for 25% of SMEs (see Chart 8).

The bolstering of cash reserves can also been seen in enterprises' consolidated financial statements, regardless of their size. The proportion of cash assets is nearly twice as great in medium-sized enterprises, at more than 13%, than in large enterprises. There are several reasons for this pattern:

- the slowdown in activity, which automatically reduces trade credit and spurs enterprises to cut inventories;
- a reluctance to invest;
- faster payments under the Economic Modernisation Act.

This situation shows how responsive enterprises are in the face of the crisis, and also how prudent their action is. But once they have adjusted their management of working capital requirements as far as they can to cope with the crisis, they will no longer have the same room for manoeuvre and must rely on a recovery in business.

Chart 8 Distribution of cash/balance sheet assets



7 *Cash and securities held for sale.*

SMEs and MTEs/large enterprises have comparable proportions of equity on their balance sheets

Earnings and savings were still positive overall, despite marked decreases. Since investment was weak, earnings and saving bolstered equity in 2009. Its share of total financing resources increased in SMEs (see Chart 9 and Table 5), but it decreased for MTEs and large enterprises. The elimination of double counting, which is particularly prevalent in large enterprises, reduces the equity ratio for all enterprises to 33.5%, which is similar to the ratio calculated on the basis of consolidated financial statements (see Box 2 and Chart 9). There is a high degree of dispersion for this ratio, particularly in SMEs. After restating the 2009 data to eliminate double counting, the equity ratio for 10% of SMEs is less than 7%, whereas for 25% of SMEs, it is greater than 62%.

Equity as a percentage of total consolidated balance sheet assets stood at 29% in 2009. The equity ratio was greater in medium-sized enterprises at 41% than it was in mid-tier enterprises, where it stood at 32%, or in large enterprises, where it stood at 28% (see Chart 10 and the definition of enterprise sizes in the consolidated financial statements in Annex 2).

Table 5 Cash reserves and equity in 2009

(%)

	Distribution of equity	2009/2008 change			
		Equity	Cash as a share of assets	Bank borrowing	Net cash reserves
By size					
French SMEs	11.0	4.5	7.1	-12.9	11.4
Foreign-owned SMEs	1.3	3.3	5.9	-25.1	12.8
French MTEs	17.9	6.1	10.3	-18.5	16.6
Foreign-owned MTEs	9.4	0.7	9.7	-18.5	14.4
Large entreprises	60.4	3.0	1.2	-7.6	1.9
By sector					
Manufacturing	42.8	1.9	3.9	-13.5	6.3
Energy, water, waste	8.5	2.7	3.1	18.7	2.7
Construction	5.4	16.7	0.5	-30.7	6.0
Trade	19.4	7.4	9.5	-5.5	12.6
Transport and storage	2.9	2.2	1.1	-1.9	1.4
Hotels and catering	1.7	2.1	39.0	4.7	42.0
Information and communication	8.8	-2.6	-11.9	12.7	-14.0
Real estate	4.8	7.5	15.7	-53.8	30.6
Business services	5.0	0.4	6.6	-23.1	9.0
Personal services	0.8	0.2	4.7	29.8	3.8
Total	**100.0**	**3.5**	**4.8**	**-13.8**	**7.3**

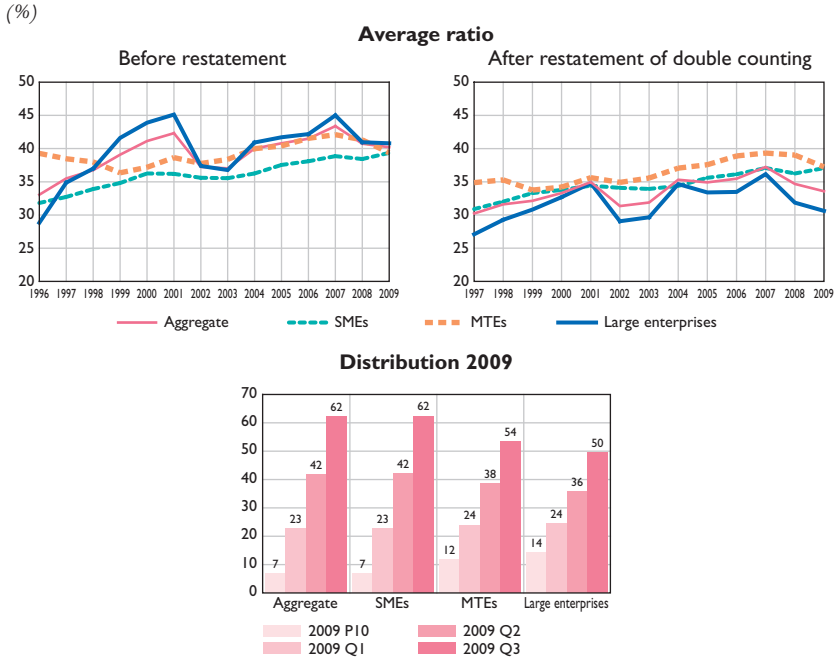
Scope: Non-financial firms, as defined by the Economic Modernisation Act, having filed balance sheets in 2008 and 2009.

Explanatory note: see Tables 1 and 2.

Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

Chart 9 Equity/total assets

(%)



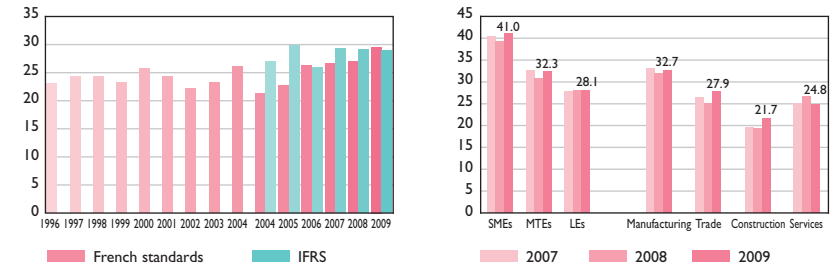
Scope: Non-financial firms, as defined by the Economic Modernisation Act.

Explanatory note: P10, Q1, Q2 et Q3 are statistical dispersion indicators. In 2009, 10% of SMEs had an equity/total assets ratio of less than 7%, 25% had a ratio of less than 23%, 50% had a ratio of less than 42% and another 25% had a ratio in excess of 62%.

Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

Chart 10 Equity as a percentage of total consolidated balance sheet assets

(%)



Scope: Non-financial enterprises on a consolidated basis.

Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

Box 2

Proposal for restating double counting errors

Restatement is intended to eliminate the effects of inter-company transactions in individual company financial statements. Such transactions result in recognition of the same values in the financial statements of different legal units of a single enterprise. In this instance, the restatement concerns financial debt, equity and financial income. It affects several financial ratios, such as the financial debt ratio, the proportion of equity, the saving rate, return on equity and the share of total income distributed as dividends.

Proposed restatement

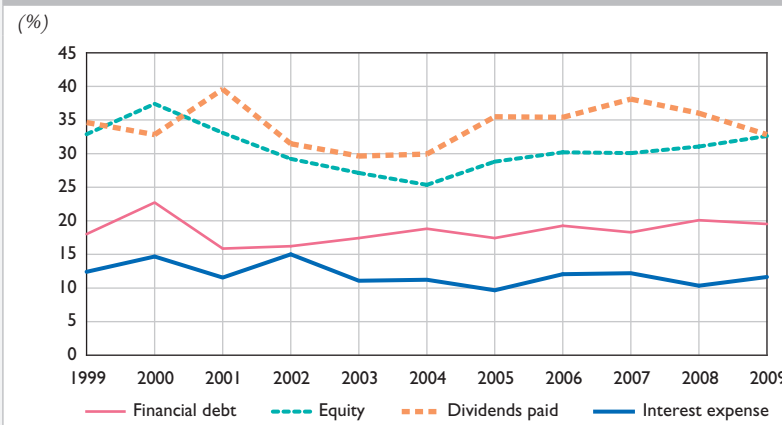
• *Financial debt: accounting information can be used to approximate inter-company loans. These loans can be eliminated for enterprises with multiple legal units where the parent is resident in France. Data are not restated in the case of a foreign parent.*[1]

• *Equity: participations net of provisions are subtracted from the equity of the parent company.*[2]

• *Financial income: dividends and interest that subsidiaries pay to their parent are eliminated; in the absence of adequately detailed data, the data are approximated by deducting financial income from participations (item GJ on the tax form) and other interest or related income received by the parent company (item GL) from the total financial income of each enterprise with multiple legal units.*

Extent of restatement

Extent of proposed restatement in each aggregate



Field: Non-financial firms, as defined by the Economic Modernisation Act.
Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

1 Item VI and part of item DV on the tax form.
2 The restatement cannot be greater than the equity of the parent company.

.../...

The extent of the restatement of data varies depending on the aggregates: the most extensive restatement concerns equity and dividend income, at more than 30% of the initial cumulative amount for all enterprises. The restated inter-company debt represents approximately 20% of total financial debt. The interest charges eliminated through restatement are equivalent to slightly more than 10% of the total amount. Logically enough, restatement primarily concerns large enterprises. More than 40% of their equity can be restated.

Impact on six financial analysis ratios

Changes over time remain the same after restatement. The only change is in the levels of the ratios.

The ratio of debt to value added is lower and more in line with the national accounts indicator, even though there is still a discrepancy.

On the other hand, the ratio of debt to equity is higher after restatement, since the restatement of equity is more extensive than the restatement of financial debt. It stood at 94% in 2009 as opposed to 79% before restatement. It is also more in line with the debt ratio derived from consolidated financial statements, especially for large enterprises. The ratio of equity to total assets is much lower. At slightly more than 30%, it becomes comparable to the ratio calculated on a consolidated basis.

The ratio of dividends paid to total income is lower, which is logical, since a large share of the dividends paid by subsidiaries goes to their parent company. The proportion of dividends was stable at approximately 10% in 2009, and 14% before restatement.

Return on equity was little affected, but the changes from one year to the next were marked. In both cases, return on equity stood at around 8% in 2009.

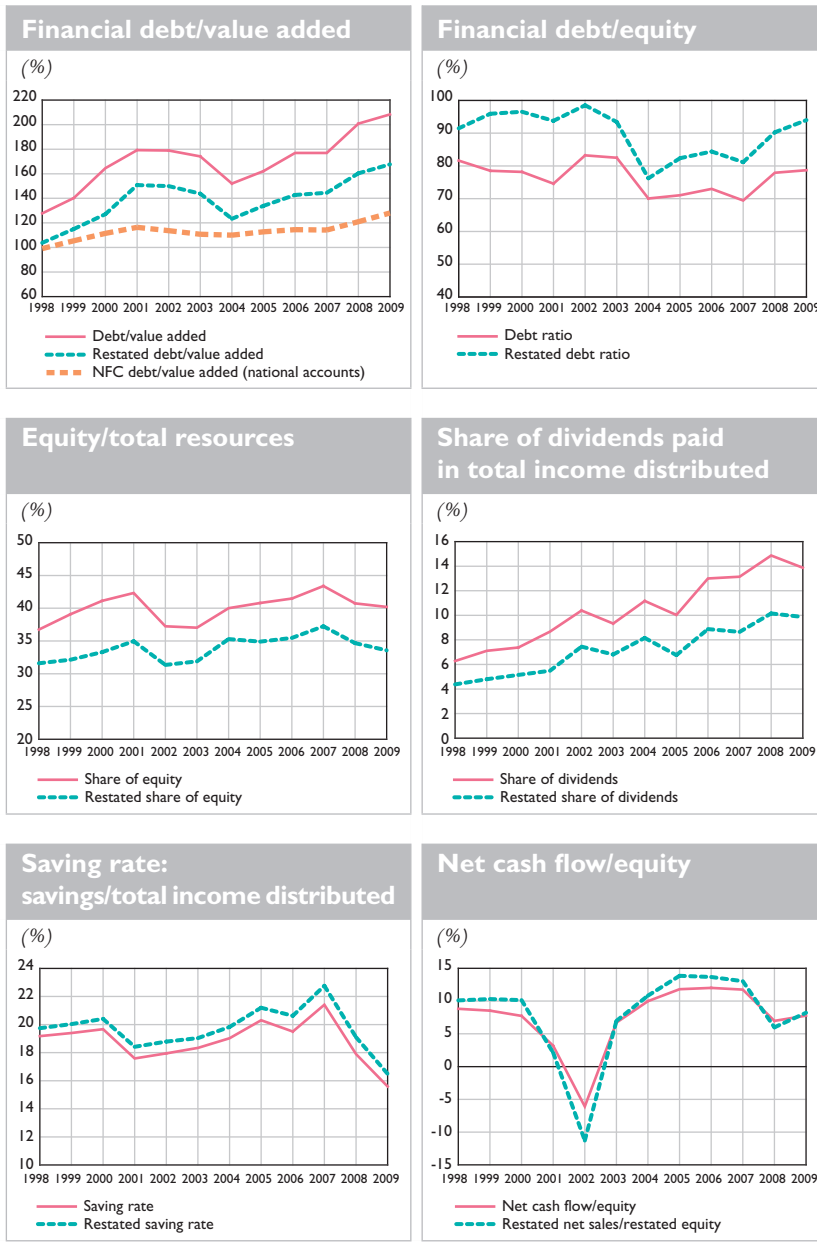
The saving rate was little changed at 16% in 2009.

Limitations of restatement

The limitations of this restatement stem from the incomplete coverage of the FIBEN database. Consequently, this coverage must be enhanced:

- *subsidiaries not included in the FIBEN database because they are non-resident or too small;*
- *foreign owned subsidiaries, where the parent company's balance sheet is not available;*
- *restatement should be refined and differentiated according to the rank of each subsidiary;*
- *equity interests of less than 50% are not captured.*

.../...



Scope: Non-financial firms, as defined by the Economic Modernisation Act.
Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

5| Financial debt patterns vary depending on enterprise categories

Large enterprises issued bonds in 2009

Overall, financial debt, which includes market financing and inter-company debts, increased by more than 3%, primarily as a result of the strong growth of bond debt in several very large enterprises (financing for external growth, debt refinancing, etc.), but also as a result of specific support measures for certain industries, such as government loans for the automotive industry. SMEs depend primarily on bank financing, which accounts for 65% of their debt. Their total debt was down by -1.2%, which includes a -3.4% decrease in bank debt (see Table 6). Short-term bank debt showed the largest decrease, accounting for only 12.3% of bank debt in 2009, as opposed to 29% ten years earlier.

Table 6 Financial debt in 2009

(%)

	Distribution of financial debt	2009/2008 change				
		Financial debt	1 – o/w bonds	2 – o/w bank debt	2.1. – o/w short-term bank loans	3 – o/w other debt
By size						
French SMEs	10.7	-0.3	13.7	-2.7	-12.9	4.4
Foreign-owned SMEs	2.0	-5.7	2.8	-9.0	-25.1	-2.9
French MTEs	19.5	2.8	3.6	-4.7	-18.5	13.7
Foreign-owned MTEs	9.1	-2.4	-2.1	-7.1	-18.5	-0.5
Large entreprises	58.8	5.2	17.8	3.8	-7.6	0.2
By sector						
Manufacturing	34.5	1.4	30.3	-4.3	-13.5	-1.3
Energy, water, waste	13.6	13.4	25.3	-12.1	18.7	11.4
Construction	5.5	-2.6	-42.7	12.9	-30.7	-2.3
Trade	17.4	4.0	15.5	0.7	-5.5	3.0
Transport and storage	4.7	9.9	-10.7	7.5	-1.9	22.5
Hotels and catering	2.4	1.3	319.5	-2.7	4.7	-4.5
Information and communication	7.9	-2.6	9.6	-7.6	12.7	-12.3
Real estate	7.8	0.0	-10.7	-2.4	-53.8	8.6
Business services	5.4	3.1	14.0	-9.4	-23.1	11.7
Personal services	0.8	7.1	45.6	-5.2	29.8	7.4
Total	**100.0**	**3.2**	**15.7**	**-1.6**	**-13.8**	**2.2**

Scope: Non-financial firms, as defined by the Economic Modernisation Act, having filed balance sheets in 2008 and 2009.
Explanatory note: see Tables 1 and 2.
Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

Credit institutions' monthly filings with the credit register provide a more nuanced picture of SMEs' bank debt. This data source covers more enterprises than the balance sheet database because it includes SMEs that are too small for the Banque de France to collect their balance sheet. The much larger sample in the credit register shows that outstanding borrowing by SMEs continued to rise, but much more slowly and that only the largest SMEs reduced their bank debt in the third quarter of 2009 (see Box 3).

Debt ratios vary greatly within each category of enterprises

The impact of debt growth more or less offset increases in equity: the ratio of debt to equity for all enterprises increased by 0.8 percentage points to 78.7% in 2009 (see Chart 11).

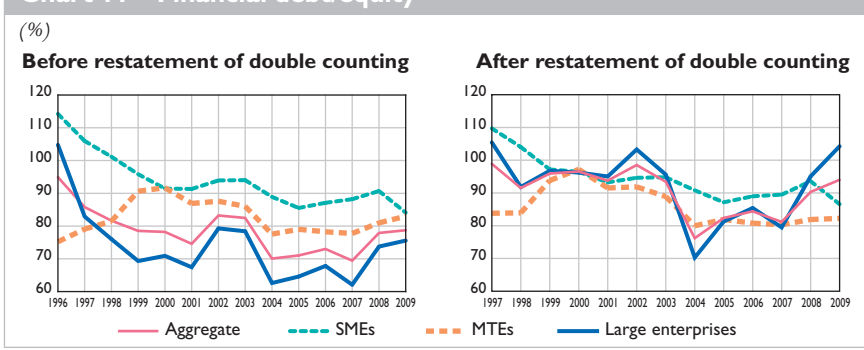
But patterns varied greatly depending on enterprise size as a result of differences financing methods. The debt ratio for SMEs was at an all-time low of 84.1%. When cash reserves are subtracted, the ratio falls to 33.9%. The median debt ratio also fell in 2009 (see Chart 12).

It is harder to interpret the pattern for the largest enterprises because of frequent double counting of various subsidiaries, some of which may be located in other countries. The elimination of such double counting changes the preliminary interpretation based on the individual companies' financial statements:

• The MTEs' debt ratio is stable if we eliminate inter-company loans, otherwise it increases, primarily as a result of "other debt", which includes inter-company loans.

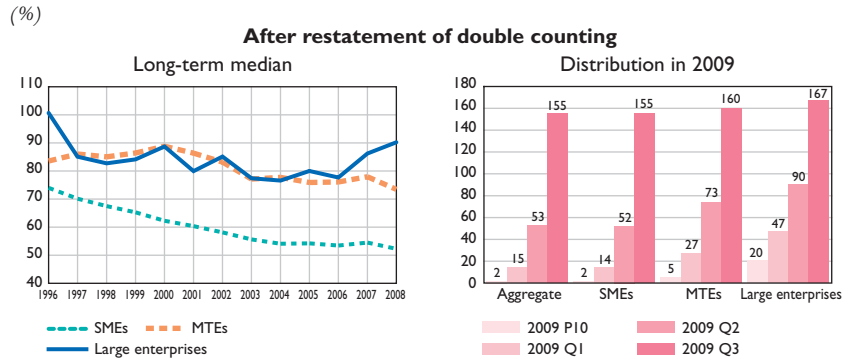
• Large enterprises' debt ratio increases, especially after restatement, primarily as a result of the increase in bond issues, but as a result of "other debt" as well. The restated debt ratio is more volatile. In 2009, it was close to the debt ratio on a consolidated basis[8] (see Box 3).

Chart 11 Financial debt/equity



8 *In large enterprises, a large number of equity investments are in foreign companies. This means that restatement may eliminate too much equity and underestimate equity after restatement. Furthermore, the proportion of inter-company financial debt is underestimated because it is not counted in the case of foreign owned subsidiaries and because the accounting information does not always provide an adequate level of detail.*

Chart 12 Financial debt/equity



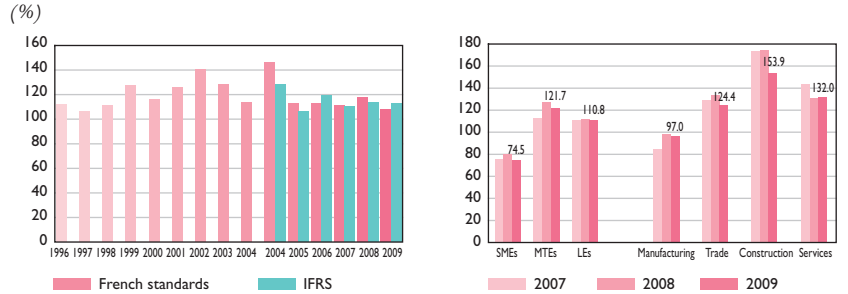
Scope: Non-financial firms, as defined by the Economic Modernisation Act.
Explanatory note: See Chart 3.
Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

Debt ratios also vary greatly within each category of enterprises, especially SMEs. One quarter of SMEs have debt ratios under 14%, which confirms the findings of earlier studies showing low levels of bank debt for many SMEs. On the other hand, another quarter of SMEs have debt ratios in excess of 155% (see Chart 12).

Enterprises consolidated debt ratios showed little variation since 2005

Consolidated financial statements show a slight decline in debt ratios to 111.9% of equity for all sectors and enterprise sizes. Medium-sized enterprises, which have the highest proportion of equity, have much lower debt ratios than large enterprises do. Their debt ratios showed little change overall since 2005 (see Chart 13).

Chart 13 Financial debt as a percentage of consolidated equity



Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

According to the interim financial statements of the leading listed companies as of 30 June 2010, the decline continued after 2009. The financial debt ratio fell from 94% on 30 June 2009 to 85% on 30 June 2010. The decline has been hastened by an increase in equity, which largely reflects foreign exchange effects (depreciation of the euro in the first half of 2010) recorded in equity under IFRS (currency translation adjustments for foreign subsidiaries).

Box 3

Bank financing for enterprises – Central Credit Register data

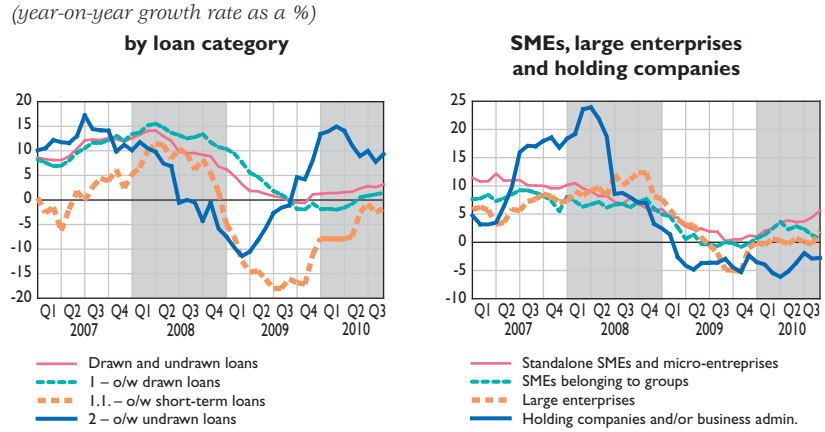
All resident enterprises

Monthly monitoring of bank loans over a vast sample of more than two million legal units shows slower growth of outstanding loans in 2009 than in 2008. The year-on-year change in short-term loans shows a decrease of 18% in the third quarter of 2009. Factoring and trade receivables were down sharply as business slowed down in 2009.

Loans to large enterprises, holding companies and parent companies declined. Lending to SMEs slowed down, but still showed growth over the year. Lending started to recover at the start of 2010, but the recovery concerned the smallest enterprises more than larger SMEs, which are the ones in our sample.

Drawn and undrawn loans at the end of September 2010

(year-on-year growth rate as a %)



Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

Resident enterprises with balance sheet data covered by the FIBEN database

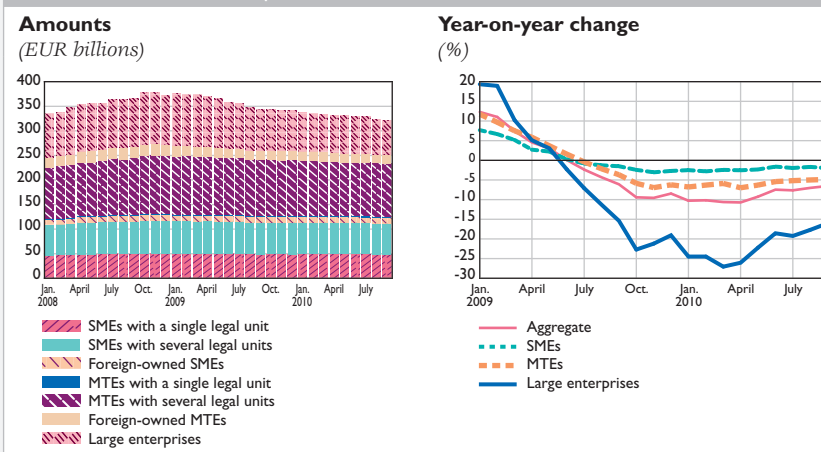
Our sample of legal units is restricted to those where the balance sheet is available, meaning the units with the highest level of activity, which gives more finely nuanced results. The SMEs in our sample decreased their outstanding borrowing by up to 3% in 2009. The trend started to reverse in 2010, but the year-on-year variation was still negative at -2% in September 2010.

.../...

Bank borrowing by the smallest SMEs grew faster than for larger ones. This is consistent with the finding that four out of five of the enterprises benefiting from successful mediation have 10 employees or less. For the smallest enterprises the success rate of mediation stood at 60% in the first quarter of 2010 (corporate credit mediation in 2010). As of 31 August 2010, more than half of the loan applications were for loans of less than EUR 40,000.

In addition to the size effect, the business sector also had an impact. Agriculture, health and social work are highly represented in the Central Credit Register, but they are excluded from the study based on balance sheet data.

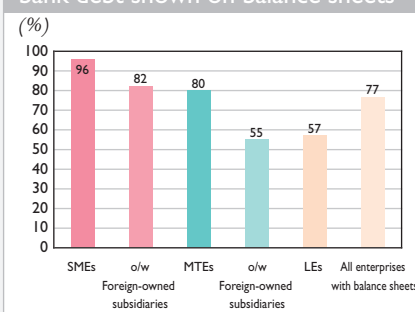
Outstanding loans reported to the Central Credit Register
Resident non-financial enterprises with balance sheets in the FIBEN database in 2008 or 2009



Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

Enterprises' borrowing from foreign banks

Enterprises with balance sheets in the FIBEN database in 2008 or 2009
Shares of outstanding loans reported to the Central Credit Register in total bank debt shown on balance sheets



Source: Companies Directorate – FIBEN database, data available at the beginning of November 2010.

Not all of the bank loans obtained by resident enterprises are recorded in the Central Credit Register. A significant share of bank loans come from non-resident credit institutions. This is true for large enterprises and MTEs as well. It is also true to a lesser extent for SMEs (up to 43% for large enterprises, 20% for MTEs and 18% for foreign-owned SMEs).

Appendix 1

FIBEN data

Database of individual company financial statements

The branches of the Banque de France collect the financial statements of individual companies. These companies account for one-third of the companies taxed on their business profits or their real normal profits. The financial statements are collected for all enterprises doing business in France with turnover greater than EUR 0.75 million or bank debt in excess of EUR 0.38 million. The enterprises covered account for more than 75% of jobs in most sectors and this percentage is 80% or more in trade and industry.

Sample used for the analysis of individual company financial statements

All commercial activities, except for the following sectors: AZ (Agriculture), KZ (finance, excluding holding companies) and OQ (General Government). The sample also excludes public establishments and semi-public companies.

The main ratios used

The financial analysis methodology and definitions of the ratios used can be found at:
http://www.banque-france.fr/fr/statistiques/economie/economie-entreprises/structures-performances-entreprises.htm

Financial links

The Banque de France records financial links and tracks the percentage of equity owned by other enterprises, distinguishing between non-financial companies (including holding companies), financial institutions (banks, collective investment schemes, insurance companies), natural persons (individual shareholders or employees), the government and non-resident enterprises.

Database of consolidated financial statements

Since 1992, the branches of the Banque de France have been collecting the consolidated financial statements of more than 4,000 enterprises. The data cover the largest enterprises in France's industrial and trade sectors. The analysis eliminates sub-groups that are consolidated elsewhere by the group's parent company.

Enterprises consolidate their financial statements by aggregating the individual financial statements of the legal units that make up the enterprise, after eliminating inter-company flows and the parent company's equity securities. All of the companies in the study sample have a parent company with its registered office in France. The consolidated structure may include subsidiaries or sub-subsidiaries with their registered office in another country.

In addition, data from the interim financial statements of 71 listed companies accounting for nearly 75% of the turnover of listed non-financial corporations were used to supplement the analysis in the first six months of 2010.

Business failures

The notion used is the initiation of legal proceedings for reorganisation or, failing that, court-ordered winding-up proceedings. However, if a business continuation plan or a business sale plan is introduced after a court-ordered reorganisation and before the company is wound up or before a new reorganisation is initiated, the initial reorganisation proceedings shall be halted. In this case, the winding-up or the second reorganisation procedure is counted as the initiation of new legal proceedings, meaning a new business failure.

The data are collected automatically from the clerks of the commercial courts in 90% of the cases and entered into the database manually for the remainder of the data relating to enterprises falling within the jurisdiction of the Court of First Instance for commercial cases. Whenever the clerk of a court enters data relating to reorganisation or winding-up proceedings into the court's computer system, the data are transmitted to the Banque de France within 24 hours. Notices in the legal gazette and the Courts of First Instance are used to supplement the data collected. Legal proceedings involving natural persons only, such as personal bankruptcies, are excluded.

Central Credit Register

Each month, the Central Credit Register records the loans granted by credit institutions to each of their customers for amounts that exceed a given threshold, which was set at EUR 25,000 in January 2006. The outstanding amounts are divided into "drawn loans" and "undrawn loans available". The drawn loans include short-term, medium-term and long-term loans, financial leases and securitised loans.

Appendix 2

Enterprise size categories and sectors

Not all data sources provide enough information to define the size of an enterprise under the terms of the Economic Modernisation Act of 4 August 2008 (LME). The information available needs to be used to approximate the defined categories as closely as possible.

1| Attribution of sizes and sectors for the analysis of individual company financial statements

The implementing decree for the Economic Modernisation Act published on 20 December 2008 defines the statistical notion of an enterprise.[1] It follows the European Commission's definitions and specifies the size categories for enterprises and the criteria used to determine them. There are four such criteria: employees, turnover, total assets of the legal units and the financial links between them.

The first three criteria are assessed for each enterprise, considered as the smallest combination of legal units constituting an organisational unit for the production of goods and services with a degree of autonomy for decision-making (defined by financial links). Financial links are considered when they represent ownership of 50% or more of the equity in a legal unit.

When an enterprise is made up of several legal units, as opposed to a single legal unit, the individual financial statements of the legal units are aggregated to define the "enterprise". This approach does not provide perfect restatement of double counting between units in the same enterprise.

The size categories are defined as follows:

• SMEs: fewer than 250 employees, with turnover of less than EUR 50 million or total assets less than EUR 43 million.

• Mid-tier enterprises (MTEs): enterprises that are not in the small and medium-sized enterprise category, that have fewer than 5,000 employees, turnover of less than EUR 1.5 billion or total assets of less than EUR 2 billion.

• Large enterprises: all other enterprises.

1 http://www.legifrance.gouv.fr/affichTexte.do jsessionid=AE22AD6AA9827C20CEBCA70F67427237.tpdjo01v_3?cidTexte=JORFTEXT00001 996 1059&categorieLien=id

Economic importance of non-financial enterprises in 2009

(thousands of employees, turnover, value added, financial debt, bank debt and equity in EUR billions)

	Number of enterprises	Number of employees	Average turnover	Value added	Financial debt	Bank debt	Equity
Aggregate	**164,509**	**8,912**	**2,502**	**641**	**1,334**	**434**	**1,695**
By size							
SMEs	160,129	3,215	694	196	181	118	216
of which foreign-owned subsidiaries	*6,601*	*239*	*78*	*19*	*28*	*13*	*24*
MTEs	4,195	2,725	840	198	389	163	469
of which foreign-owned subsidiaries	*1,212*	*888*	*325*	*76*	*126*	*33*	*163*
Large enterprises	185	2,972	967	247	764	154	1011
By sector							
Manufacturing	28,024	2,513	796	193	459	115	724
Energy, water, waste	1,670	361	134	36	175	16	141
Construction	28,141	907	174	59	76	40	93
Trade	61,957	2,268	958	149	237	91	334
Transport and storage	7,179	561	105	35	62	32	50
Hotels and catering	7,244	338	35	17	32	15	29
Information and communication	4,317	375	127	62	101	23	147
Real estate	8,319	63	23	13	108	69	81
Business services	15,876	1,428	138	71	71	27	83
Personal services	1,782	99	13	6	12	6	14
Breakdown							
By size							
SMEs	97.3	36.1	27.8	30.6	13.6	27.1	12.7
of which foreign-owned subsidiaries	*4.0*	*2.7*	*3.1*	*3.0*	*2.1*	*3.0*	*1.4*
MTEs	2.6	30.6	33.6	30.9	29.2	37.5	27.7
of which foreign-owned subsidiaries	*0.7*	*10.0*	*13.0*	*11.9*	*9.5*	*7.6*	*9.6*
Large enterprises	0.1	33.3	38.7	38.5	57.2	35.4	59.6
By sector							
Manufacturing	17.0	28.2	31.8	30.1	34.4	26.5	42.7
Energy, water, waste	1.0	4.0	5.4	5.6	13.1	3.6	8.3
Construction	17.1	10.2	6.9	9.3	5.7	9.2	5.5
Trade	37.7	25.5	38.3	23.2	17.8	20.9	19.7
Transport and storage	4.4	6.3	4.2	5.4	4.7	7.4	3.0
Hotels and catering	4.4	3.8	1.4	2.6	2.4	3.5	1.7
Information and communication	2.6	4.2	5.1	9.7	7.6	5.3	8.7
Real estate	5.1	0.7	0.9	2.0	8.1	15.9	4.8
Business services	9.7	16.0	5.5	11.2	5.3	6.1	4.9
Personal services	1.1	1.1	0.5	0.9	0.9	1.5	0.8

Scope: Non-financial enterprises, as defined by the Economic Modernisation Act. All commercial activities, except for the following sectors: AZ (Agriculture), KZ (finance, excluding holding companies) and OQ (General Government).
Explanatory note: population analysed on the basis of 230,000 legal units' 2009 balance sheets, accounting for more than 75% of enterprises with more than ten employees.
Source: Companies Directorate – FIBEN database, November 2010.

Average size of each category of enterprise in 2009

(units and EUR millions)

	Number of enterprises	Average number of employees	Average turnover	Value added	Financial debt	Bank debt	Equity
Aggregate	**164,509**	**54**	**15.2**	**3.9**	**8.1**	**2.6**	**10.3**
SMEs	160,129	20	4.3	1.2	1.1	0.7	1.3
MTEs	4,195	650	200.3	47.2	92.7	38.8	111.8
Large enterprises	185	16,063	5,227.2	1,332.6	4,128.7	832.0	5,462.7

SMEs and MTEs may be a single legal unit or else be made up of several legal units that report to a French or foreign parent company.

The activity sector is based on the authorised 2008 classification, which is derived from the NAF rév. 2 classification. For enterprises made up of several legal units, the activity sector is determined by grouping the legal units by sector. The designated sector is the one of the legal units with the largest turnover in the enterprise, as long as it exceeds 50%. If this is not the case, the various "groups" of legal units are classified by sector according to the number of employees working in each sector, with the same requirement that this number be greater than 50%. Failing this, the classification is based on turnover to designate the sector of the units accounting for the largest share of turnover.

2| Definition of enterprise sizes for the analysis of consolidated financial statements

The following size classes are used for analysis of consolidated financial statements. They are aligned on the size classes used for the analysis of individual company financial statements:

• Medium-sized enterprises: fewer than 250 employees, with turnover of less than EUR 50 million or total assets less than EUR 43 million.

• Mid-Tier Enterprises: enterprises that are not in the first group that have fewer than 5,000 employees, annual turnover of less than EUR 1.5 billion or total assets of less than EUR 2 billion.

• Large enterprises: other enterprises.

Consolidated financial statements
Distribution of enterprises in 2009

(turnover in EUR billions; distribution as a %)

	Units	Turnover		Total assets		Equity	
		EUR bn	Breakdown	EUR bn	Breakdown	EUR bn	Breakdown
1| Main sectors							
Agriculture	26	3	0.2	4	0.1	1	0.2
Industry (including energy)	1,223	914	48.2	1,468	51.1	480	57.6
Trade	1,146	446	23.5	298	10.4	83	10.0
Construction	268	113	6.0	147	5.1	32	3.8
Services	1,101	421	22.2	955	33.3	237	28.5
Total	**3,764**	**1,898**	**100.0**	**2,871**	**100.0**	**833**	**100.0**
2| Enterprise size							
Medium-sized enterprises	1,499	49	2.6	51	1.8	21	2.5
Mid-tier enterprises	2,066	397	20.9	477	16.6	154	18.5
Large enterprises	199	1,452	76.5	2,343	81.6	658	79.0

Scope: Non-financial enterprises on a consolidated basis.
Source: Banque de France – FIBEN – data from November 2010.

3| Definition of enterprise size categories applying to legal units for the analysis of outstanding loans using the data from the Central Credit Register

In this case, size is determined at the level of the legal units, since the only indicator currently available is whether or not an enterprise belongs to a group. Unlike the balance sheet data, the Central Credit Register provides no data on financial links that can be used to reconstitute the enterprise size categories.

Micro-enterprises: turnover under EUR 1.5 million, unknown or too old, but with outstanding loans of less than EUR 1 million.

SMEs, excluding micro-enterprises: turnover between EUR 1.5 million and EUR 50 million, or turnover under EUR 1.5 million, or unknown or too old, but with outstanding loans of EUR 1 million or more and under a sector-specific threshold.

Large enterprises: enterprises with outstanding loans in excess of the sector-specific thresholds are automatically classified as large enterprises, regardless of their turnover.

Special breakdowns are carried out to isolate holding companies and enterprises in the real estate sector.

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Payment periods in 2009

One year on from the Economic Modernisation Act

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One year after the Economic Modernisation Act (LME) came into force in early 2009 and corporate trade credit was capped, payment periods shortened in 2009. Interpreting annual trends over the past two years has been complicated by a recessionary environment, with a steep fall in activity at end-2008, followed by a gradual recovery. But a number of indicators have confirmed the contraction in payment periods – which should, however, be considered over a two-year period.

Measured using the concept of "legal unit", average payment periods declined from 54 days sales outstanding (DSO) to 52 days, and from 64 days payable outstanding (DPO) to 61 days in the space of one year. Measured using the concept of "enterprise" as defined in the LME enabling legislation, these periods fell from 51 to 49 DSO and from 59 to 56 DPO.

The contraction concerns all types of company and not just small and medium-sized enterprises (SMEs). However, some large companies seem to have bucked the overall trend, and this is particularly noticeable in manufacturing.

Most importantly, the decline in payment periods, which was moderate until 2007, has entered a period of sharp acceleration. As a result, the declines observed in 2008 and 2009 exceed those for the previous eight years. At the same time, SMEs are no longer shouldering most of the effort to shorten DPO, as was the case between 1999 and 2007. At present, mid-tier enterprises (MTEs) and large companies are also involved.

The business cycle is accelerating. In 2009 60% of companies were paid or settled their creditors within 60 days, between 10 to 15 points higher than in 1999. And the dispersion of behaviour between companies with shorter times and those with longer times is decreasing.

Based on a macroeconomic simulation of all companies moving to a maximum 60-day payment period, the total cash earnings generated by shorter payment periods can be estimated at no less than EUR 2 billion both in 2008 and in 2009. The main beneficiaries have been SMEs, which gained an estimated EUR 3 billion in 2009. As regards risk, the level of outstandings representing intercompany payables and receivables has fallen slightly.

Finally, as in previous years, reliance on bank debt seems to be characteristic either of companies that suffer long payment periods or of those that pay suppliers belatedly.

Keywords: payment periods, days sales outstanding, days payable outstanding, credit financing, trade credit balance, LME.
JEL codes: L14, L29.

Note: This study uses data from the FIBEN databases of the Banque de France, available in November 2010. The detailed findings are available in the statistical report, accessible at: http://www.banque-france.fr/fr/statistiques/economie/economie-entreprises/delais-paiement.htm.

1| Payment periods shortened in 2009

The measures introduced under the Economic Modernisation Act (LME) in order to cap corporate trade credit resulted in a sharp reduction in payment times in 2009 for almost all companies studied on the basis of accounting data available at early November 2010 (Appendix 1). This fall has been observed despite the 39 derogation agreements that are valid until end-2011 and concern nearly 20% of the French economy.

Average individual days sales outstanding (DSO) and days payable outstanding (DPO) fell by 2.5 days in 2009 to 52 days and 61 days, respectively (Table 1). Corporate trade credit remained stable.

Table 1 Days sales outstanding (DSO) and days payable outstanding (DPO) by size of legal unit (a) **(1990 – 2009)**

(unweighted averages of individual ratios, calculated on a legal unit basis)

	Year	Total	SMEs	MTEs	Large units	Breakdown, SMEs:		
						o/w small:		o/w midsize
						VSBs	Non VSBs	
			Staff (0-249)	Staff (250-4,999)	Staff > 5,000	Staff (10-19)	Staff (20-49)	Staff (50-249)
Number of legal units ('000)	2009	230.6	221.2	9.2	0.3	82.8	35.0	30.5
DSO (in days of sales)	1990	64.0	63.6	72.3	56.6	61.1	70.2	70.5
	1999	59.2	58.8	69.3	63.3	59.6	66.4	65.5
	2007	56.5	56.0	67.4	58.0	56.6	64.0	64.0
	2008	54.3	53.8	64.9	58.7	54.7	61.9	61.2
	2009	51.8	51.4	61.3	61.1	52.2	58.8	57.6
	s.d. (2009)	(0.10)	(0.10)	(0.56)	(3.53)	(0.16)	(0.22)	(0.27)
	Chg 2009	**-2.5**	**-2.4**	**-3.6**	**2.3**	**-2.5**	**-3.0**	**-3.6**
DPO (in days of purchases)	1990	74.6	74.8	70.7	66.9	73.6	77.8	73.3
	1999	70.3	70.1	75.3	67.7	70.1	73.0	70.8
	2007	66.5	66.2	74.4	70.5	65.6	67.9	69.1
	2008	63.8	63.4	71.6	68.6	62.8	64.4	66.0
	2009	61.2	60.9	69.0	70.0	60.3	60.2	63.3
	s.d. (2009)	(0.10)	(0.10)	(0.50)	(2.91)	(0.16)	(0.18)	(0.25)
	Chg 2009	**-2.5**	**-2.5**	**-2.6**	**1.4**	**-2.5**	**-4.2**	**-2.7**
Trade credit balance (in days of sales)	1990	13.7	13.1	25.7	12.3	9.3	22.7	22.0
	1999	14.0	13.8	20.9	12.7	14.2	23.4	19.2
	2007	16.1	16.0	18.2	6.5	16.2	24.6	19.9
	2008	16.1	16.0	18.1	10.4	16.4	24.6	19.4
	2009	16.2	16.2	18.3	11.2	16.4	24.4	19.3
	s.d. (2009)	(0.10)	(0.10)	(0.53)	(3.13)	(0.16)	(0.21)	(0.26)
	Chg 2009	**0.2**	**0.2**	**0.2**	**0.8**	**0.1**	**-0.2**	**-0.1**

(a) See Appendix 1 for the scope of the study and full definition of sizes.
Source: Banque de France – Payment Period database extracted from FIBEN – November 2010.

Payment periods for mid-tier enterprises (MTEs) fell even further. On the whole, in 2009, their customers paid them 4 days earlier than in the previous year – a payment period close to the legal 60-day maximum – and they paid their suppliers nearly 3 days earlier, bringing payment times down below the 70-day mark for the first time since 1998.

The decline for small and medium-sized enterprises (SMEs) ranged between 2.5 and 4 days, depending on company size and type of payment period. The largest reductions regarding DSO concerned midsize firms, and small firms employing between 20 and 49 employees in terms of DPO.[1] The smallest reduction was for very small businesses (VSBs).

Payment periods for large companies are highly sensitive to size definitions

Calculated on the basis of legal units, and applying the thresholds set forth in the LME enabling legislation, payment periods for large units employing more than 5,000 employees increased by between 1 and 2 days in 2009 (Table 1). However, this figure is based on individual findings for a category that is numerically small and hardly meaningful, comprising fewer than 300 legal units in 2009.

Actually, compared with previous studies, the new size classes based on LME statistical criteria have substantially altered the definition of large companies (see Box). Under this definition, the concept of "legal unit" is replaced by the notion of "enterprise", which encompasses all legal units in the same group.

When used for large units with over 5,000 employees, this new approach can target the individual behaviour of large companies with greater accuracy by using more relevant accounting aggregates. A total of 180 large companies were identified in 2009, comprising 6,984 legal units compared with 300 legal units on initial examination. They account for 38% of sales and purchases for the study sample, compared with 28% for the legal-unit approach.

If the LME "enterprise" criterion is used, the situation is very different from that derived from a legal-unit based analysis. According to this aggregate, the average payment period for large enterprises (LEs) has contracted. In 2009 the average of these firms' individual DSO and DPO ratios fell by 3 days of sales for DSO and 5 days of purchases for DPO (Table 2).

1 This category corresponds more specifically to small companies not classified as other small enterprises (non-VSB SMEs). See Appendix 1 for more information on size categories.

Table 2 Days sales outstanding (DSO) and days payable outstanding (DPO) by size of enterprise (a) (1999 – 2009)

(unweighted averages of individual ratios, calculated on an enterprise basis)

	Year	Total	SMEs Staff (0-249)	MTEs Staff (250-4,999)	LEs Staff > 5,000
Number of enterprises ('000)	2009	171.6	167.2	4.2	0.2
DSO (in days of sales)	1999	57.2	56.8	71.9	64.7
	2007	53.5	53.2	66.2	59.0
	2008	51.2	50.9	62.5	57.7
	2009	49.0	48.7	59.4	54.6
	Chg 2009	**-2.2**	**-2.2**	**-3.1**	**-3.1**
DPO (in days of purchases)	1999	67.8	67.6	74.2	76.2
	2007	61.9	61.7	70.5	73.0
	2008	58.7	58.5	66.6	70.6
	2009	55.8	55.6	63.6	66.0
	Chg 2009	**-2.9**	**-2.9**	**-3.0**	**-4.7**
Trade credit balance (in days of sales)	1999	12.9	12.6	23.6	18.5
	2007	13.9	13.8	19.7	14.5
	2008	13.7	13.6	18.6	14.2
	2009	14.0	13.9	18.6	14.0
	Chg 2009	**0.3**	**0.3**	**0.0**	**-0.2**

(a) See Appendix 1 for the scope of the study and full definition of sizes.
Source: Banque de France – Payment Period database extracted from FIBEN – November 2010.

Box

The "enterprise" concept and its impact on individual trend patterns

The enabling legislation for the LME defines "enterprise" in terms of economic criteria based on headcount, sales (turnover) and total assets (Appendix 1). Different thresholds are applied to each of these criteria once all the legal units related to the same enterprise have been amalgamated. Three broad categories are defined: SMEs, MTEs and large enterprises (LEs). This approach reduces the number of entities studied individually: the Payment Period database compiled for 2009 contains around 231,000 separate legal units but slightly fewer than 172,000 enterprises (Table A1, Appendix 1).

The microeconomic trends observed from individual ratio averages differ very little in the case of SMEs and MTEs, whichever calculation approach is used (Chart 1). By contrast, payment periods for large enterprises decline.

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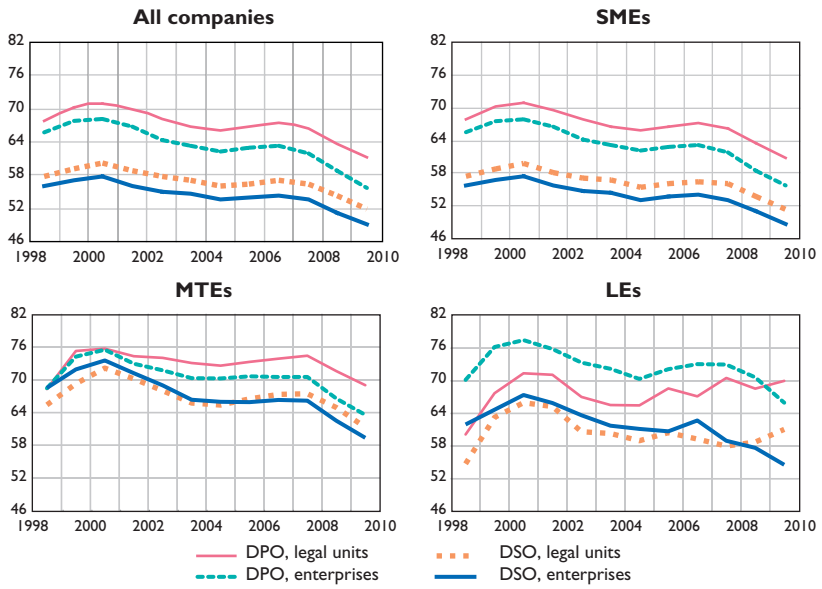
Chart 1 DSO and DPO – average of individual ratios for legal units compared with average of individual ratios for enterprises (1998 – 2009)

(DSO in days of sales, DPO in days of purchases)



Source: Banque de France – Payment Period database extracted from FIBEN – November 2010.

The average of individual ratios calculated using the "enterprise" approach is structurally lower than that derived from a legal unit segmentation. This is attributable to the dilution that occurs when entities – some of them potentially very small – associated with long payment times are incorporated into a uniform economic whole (a corporate group).

This difference in the level of average individual payment periods, which increases steadily over time, does not affect the validity of most of these results, with the singular exception of those for large units. Broadly, payment periods have been contracting for the past ten years, and more quickly since 2007, regardless of whether calculated on the basis of legal units or enterprises. Moreover, the difference is not symmetrical; it is generally larger for the DPO ratio, thus helping reduce the trade credit balance for all companies by between 1 and 2 days (Chart 2).

In sum, the new definition of "enterprise" overcomes the problem of organisation-based segmentations, for which the legal-unit approach is largely unsuitable.[1] Hence a subsidiary connected to the purchasing function on the organisation chart and financed by the group's internal resources may be the only legal unit of that group to be considered as a large enterprise. By amalgamating all the group's legal units (regardless of whether they are connected to production or marketing functions) into the "large enterprise" category, the new definition strengthens the consistency of the variables used to calculate payment period ratios (accounts receivable and sales for example).

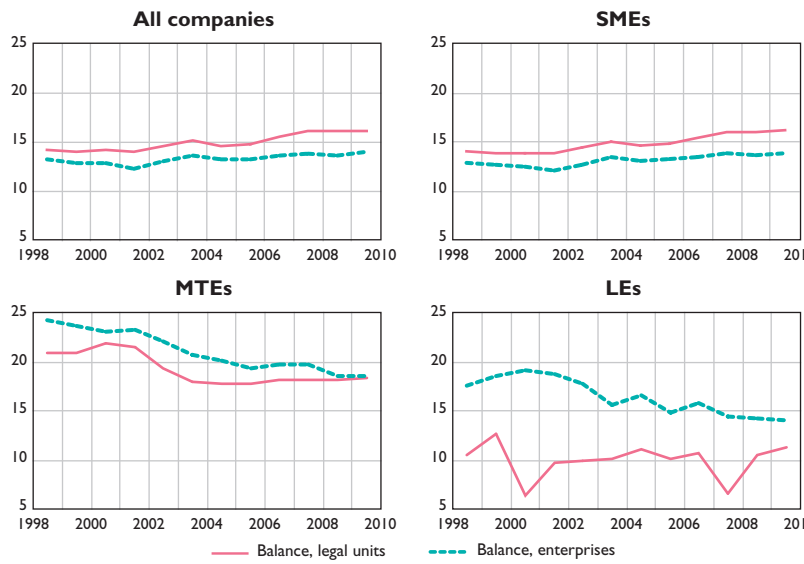
.../...

1 Particularly when an increase in the criteria specific to the size definition reduces the number of units in a category.

Although the adoption of a group segmentation is not in question, it has one limitation. Sales and purchases increase as a result of dealings between subsidiaries. Logically, grouping them together artificially inflates the sales and accounts receivable of the new entity.

Chart 2 Trade credit balance – average of individual ratios for legal units compared with average of individual ratios for enterprises (1998 – 2009)

(trade credit in days of sales)



Source: Banque de France – Payment Period database extracted from FIBEN – November 2010.

Some large companies buck the general trend

The macroeconomic approach, i.e. the analysis of average payment periods, in which every company plays a part according to its economic weight, places greater emphasis on the behaviour of major customers (Table 3).[2] For this reason it supplements the microeconomic approach, based on simple unweighted averages and presented above.

The increase in weighted average payment periods for large companies and the limited decline in MTEs' periods point to a mismatch in individual behaviour within the two categories, whereby companies that are clearly beyond the average trend stand apart from other companies.

2 *Average payment periods for customers and suppliers are calculated by comparing the grand total of accounts payable and accounts receivable to total sales and purchases, respectively. These ratios are also defined as the average of individual ratios weighted by the economic significance of each company in total sales or purchases.*

With regard to DSO, this difference can be explained by the fact that non-SMEs are now more heavily involved in international trade. Greater international exposure actually means that a company's DSO is less sensitive to the impact of the LME. Since its non-resident debtors may benefit from less stringent domestic legislation, the company will have difficulty bringing forward its outstanding receivables. Moreover, it may agree to longer payment terms, in order to enhance its competitiveness.

In terms of markets, geographical positioning is also key. Various studies by Altares and Atradius have regularly highlighted differences in payment periods and late payments worldwide, including within the European Union.

Lastly, exporters have recently been harder hit by variations in the business cycle.[3] In some cases they have significantly adjusted their payment periods, to varying degrees according to the sector, thus reflecting a trend that does not stem solely from relations between "resident" customers and suppliers. Hence, in 2008 the level of DSO and DPO may have been understated because it was calculated on the basis of customer receivables that were much lower at the end of the year. (Further details about how this bias is estimated are given later on this paper.)

Table 3 Days sales outstanding (DSO) and days payable outstanding (DPO) by size (a) (1999 – 2009)

(weighted averages of individual ratios, calculated on an enterprise basis)

	Year	Total	SMEs Staff (0-249)	MTEs Staff (250-4,999)	LEs Staff > 5,000
Number of enterprises ('000)	2009	171.6	167.2	4.2	0.2
DSO (in days of sales)	1999	58.7	56.3	62.1	57.5
	2007	53.0	54.9	56.7	48.4
	2008	51.4	52.4	53.5	48.8
	2009	50.4	49.3	51.7	50.1
	Chg 2009	**-1.0**	**-3.1**	**-1.8**	**1.3**
DPO (in days of purchases)	1999	66.0	61.5	63.9	73.9
	2007	62.0	58.9	60.0	66.0
	2008	58.4	55.6	55.5	63.0
	2009	57.7	52.6	54.3	64.5
	Chg 2009	**-0.8**	**-3.0**	**-1.2**	**1.5**
Trade credit balance (in days of sales)	1999	10.9	10.5	13.4	8.7
	2007	6.4	11.7	9.7	-0.4
	2008	6.9	11.6	10.0	0.7
	2009	7.5	11.5	10.2	2.2
	Chg 2009	**0.6**	**-0.1**	**0.2**	**1.5**

(a) See Appendix 1 for the scope of the study and full definition of sizes.
Source: Banque de France – Payment Period database extracted from FIBEN – November 2010.

3 *In 2009 MTEs' export sales declined by 18%, compared with 15% for their total sales. For large companies, export sales fell 19% compared with 9.6% for total sales (Companies Observatory,* "La situation des entreprises en 2009"*).*

Industry is one of the sectors with the sharpest declines

In 2009 payment periods contracted in the main sectors of the economy (Table 4). The decline is particularly noticeable in manufacturing, where the majority of sub-sectors have recorded reductions of more than 10 days since 2007. Trade and construction have also seen significant improvements, with sharp reductions ranging from 4 to 7 days. By contrast, the downtrend has bypassed the real estate sector.

Table 4 Days sales outstanding (DSO) and days payable outstanding (DPO) by sector (2007 – 2009)

(unweighted averages of individual ratios, calculated on an enterprise basis)

Sector	DSO (in days of sales)			DPO (in days of purchases)			Trade credit balance (in days of sales)		
	2007	2008	2009	2007	2008	2009	2007	2008	2009
AZ – Agriculture, forestry, fishing	60.1	57.2	56.1	80.2	76.3	73.9	10.5	8.7	8.0
C1 – Manufacture of food products, beverage and tobacco products	43.6	41.8	39.6	58.2	55.1	51.4	2.5	2.6	3.6
C2 – Manufacture of coke and refined petroleum products	71.9	60.1	56.3	55.7	49.3	48.0	17.6	16.2	16.8
C3 – Manufacture of computer, electronic and electrical products; manufacture of machinery and equipment	82.0	78.4	70.9	77.6	73.7	64.4	31.4	30.3	30.6
C4 – Manufacture of transport equipment	67.3	63.4	59.1	77.1	70.3	64.3	12.1	13.8	15.9
C5 – Other manufacturing	75.0	71.6	64.3	73.1	68.3	61.0	29.7	29.3	27.2
C1-C5 – Total manufacturing	**71.1**	**67.7**	**61.1**	**71.6**	**67.1**	**60.0**	**25.5**	**25.0**	**23.6**
DE – Extractive industries, energy, water, waste management, remediation	72.2	67.9	67.5	71.2	67.4	66.7	27.4	24.9	25.3
FZ – Construction	73.7	71.2	70.1	69.9	65.6	62.9	30.2	30.2	31.3
GZ – Wholesale and retail trade; repair of motor vehicles and motorcycles	33.4	31.4	29.9	52.6	49.7	47.0	-7.7	-7.4	-6.2
HZ – Transportation and storage	58.9	55.5	55.2	48.5	43.9	44.5	29.3	28.2	28.1
IZ – Accommodation and food services	8.8	8.3	8.1	51.6	49.3	49.0	-16.2	-15.9	-16.2
JZ – Information and communication	89.0	86.1	82.5	80.3	79.0	75.5	47.1	45.8	44.1
LZ – Real estate	34.5	34.5	35.7	61.2	64.7	67.9	12.0	11.9	14.1
MN – Scientific and technical activities, administrative and support services	85.3	82.8	80.8	70.9	67.5	65.1	51.2	50.6	50.2
RS – Services to households	39.8	39.3	40.6	59.1	58.3	57.9	8.8	8.7	10.2

Source: Banque de France – Payment Period database extracted from FIBEN – November 2010. NAF version 2 (2008).

Several of the sectors that were among the latest payers in 2007 and 2008 significantly reduced their payment periods in 2009, and there were no increases. In terms of DSO, of the five sectors with periods in excess of 70 days of sales in 2008, two of them – both in manufacturing – saw a decline of more than 7 days in 2009, while a third (information and communication) reduced them by around 4 days. For DPO, four sectors had periods of more than 70 days of purchases in 2008, and two of them (also in manufacturing) shortened them by 6 and 9 days in 2009. In the three other manufacturing subsectors, the decline in the DPO ratio varied between 1 and 7 days.

However, several sectors did not avoid a larger contribution to trade credit financing. The increase reached 2 days for transport equipment manufacturing and property, and 1 day for agrifood, construction and trade.

By contrast, six sectors benefited from additional sources of financing in 2009, notably industrial product manufacturers, and the information and communication sector, where the debit balance contracted by 2 days' sales.

Factoring in the cycle, the real shift in practices occurred in 2009

Economic conditions during the period 2008-2009 were in many ways exceptional. In view of the sharp contraction in the business cycle from second-quarter 2008 and the recovery that began in second-quarter 2009, the over-time consistency of the inputs used to calculate the various indicators is debatable.

The question arises because a marked change in the growth rate within the year, especially a trend reversal such as the one in 2009, can reveal a bias in the measurement of payment periods, linked to the calculation method. These indicators are constructed with accounting data that relate to different time horizons and are collated once a year. Sales and total purchases, used in the denominators of the DSO and DPO ratios, respectively, reflect a company's business flows throughout the year. By contrast, outstanding accounts receivable and accounts payable, used in the ratios' numerators, give a snapshot of the year-end situation. In other words, accounts receivable and accounts payable do not directly match the volume of sales and purchases booked in the accounts. This discrepancy has little impact if patterns are regular, but can become problematic in the event of sharp swings during the course of the year.

For the sectors most exposed to cyclical variations, specifically industry and construction, the analysis of the cycle's impact suggests that the declines that apparently occurred in 2008 actually took place after 1 January 2009 (Appendix 2).[4]

The cancellation of the bias and the recalculation of the individual payment period averages suggest that:

- The decline in activity in second half 2008, and in particular the steep fall at year's end, introduces a significant bias. Calculated from a level of annual sales that only partially reflects the economic situation at the end of the year, the apparent payment periods for end-2008 are underestimated by 2 days.

- By contrast, the average of the recalculated individual payment periods for 2009 is close to the average apparent periods, with a discrepancy of less than 0.5 days. The reason for this modest impact is that activity was less variable from second quarter 2009 onwards.

- When measured over two years, the reduction in payment times is comparable. If the bias is factored in, the decline has to be time-shifted, since nearly three quarters of it occurred during 2009, i.e. after LME came into effect.

Cancelling out the impact of cyclical fluctuations – and eliminating the bias – confirms that the new statutory measures had a significant and swift impact.

2| The LME is changing payment behaviour

The share of payments under 60 days has risen 15 points in ten years…

In 2009 more than 60% of companies settled their invoices or were themselves paid at 60 days or less (Chart 3).

Ten years earlier this proportion was between 10 and 15 percentage points smaller. For DSO, the improvement mainly coincided with a contraction in the relative share of payments in the 90-120 day time segment.

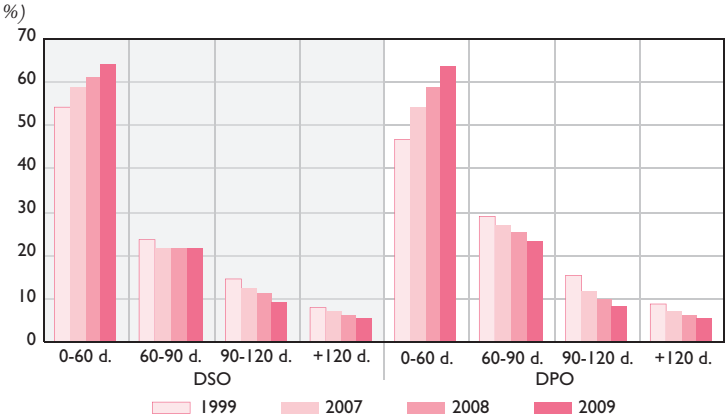
Regarding DPO, – in addition to the greater number of companies paying at less than 60 days – the relative share of payments at between 60 and 90 days has also declined.

Moreover, the proportion of companies receiving payment at less than 60 days is more uniform from one size category to another (Chart 4).

4 *Estimates of the measurement bias and its impact are confined to industry, energy and construction, where the INSEE's ICA sales index made it possible to calculate the drift. In 2008 and 2009 companies in these sectors experienced wider-than-average variations.*

Chart 3 Payment periods per time segment (calculated on an enterprise basis, 1999-2009)

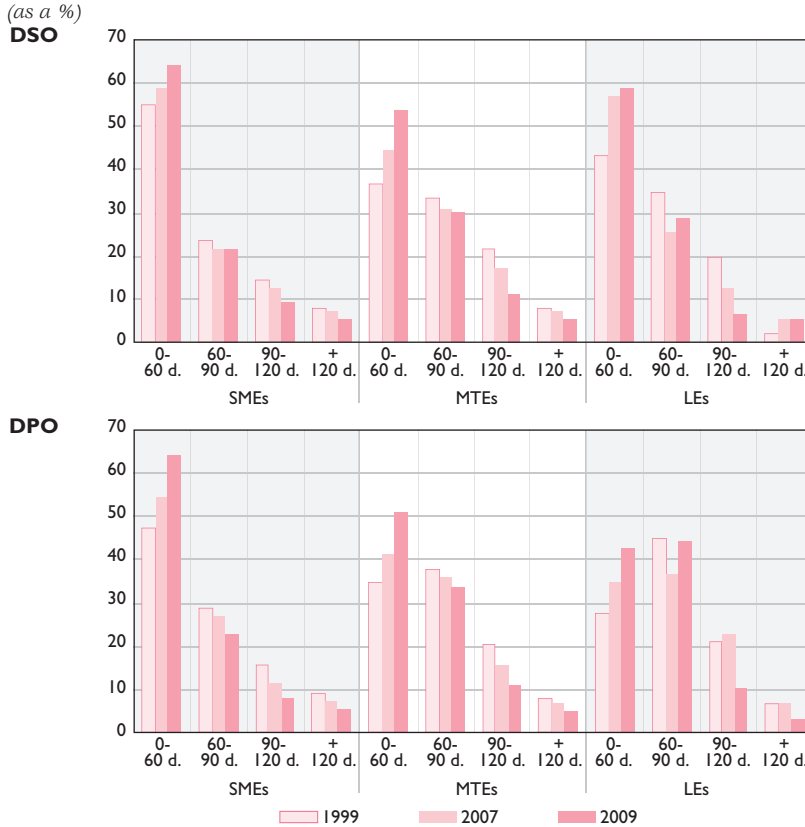
(as a %)



Source: Banque de France – Payment Period database extracted from FIBEN – November 2010.

Chart 4 Payment periods per time segment, calculated on an enterprise basis for each size category (1999 – 2009)

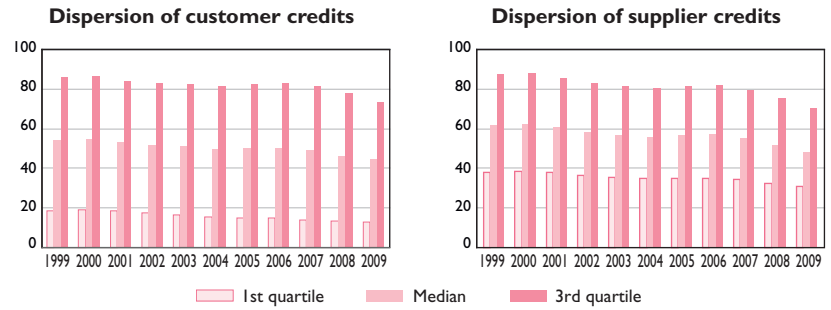
(as a %)



Source: Banque de France – Payment Period database extracted from FIBEN – November 2010.

Chart 5 Dispersion of supplier and customer credits, measured on an enterprise basis (1999 – 2009)

(days of sales; days of purchases)



Source: Banque de France – Payment Period database extracted from FIBEN – November 2010.

Since 1999, all categories of companies have made progress in terms of DSO, especially as regards the 90-120 day time segment.

Regarding DPO, SMEs account for the majority of companies that settle their trade debts within 60 days (nearly 65% in 2009, compared with 55% in 2007). As in 1999, nearly one large company in two continues to initiate payment of its expenses at between 60 and 90 days, although the recent increase for this time segment also results from a steep fall in late payments. Likewise, one MTE in two was still paying suppliers after 60 days in 2009. That said, the figure was more than 65% ten years earlier.

… and the dispersion between "good" and "bad" payers has decreased

Between 2007 and 2009 the average period exceeded by the 25% of companies practising the longest payment times went from 84 to 73 days of sales for DSO, and from 86 to 72 days of purchases for DPO (Chart 5). This metric had changed only slightly since 1999.

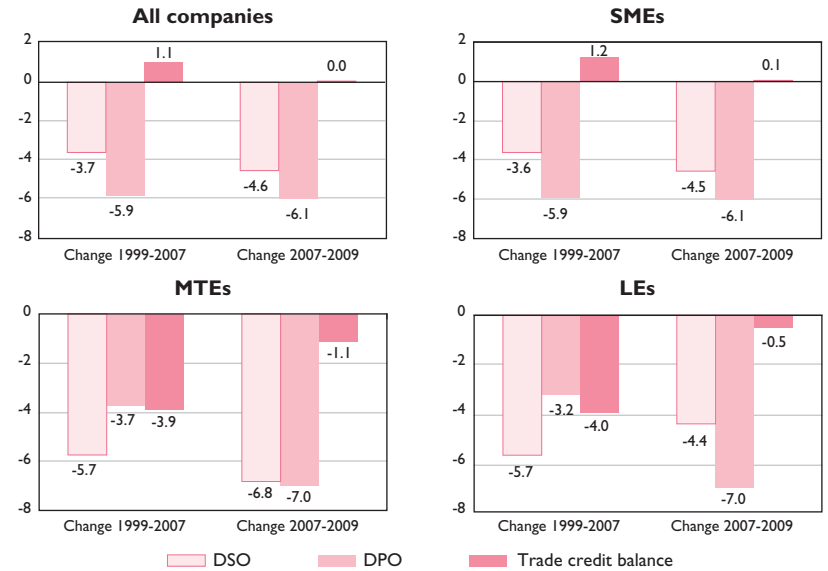
At the same time, behavioural differences also became less marked. The differential between the 25% of fastest and slowest payers, both for DSO and DPO, narrowed by between 6 and 7 days on average from 2007 to 2009. The companies that imposed the longest payment times on their suppliers, and hence are the most exposed by definition to statutory penalties, are those that have made the largest contribution to reducing payment times.

The contraction in payment periods has accelerated sharply since 2007…

Compared with the trends underway since 1999, the extent of the reduction in companies' payment periods between 2007 and 2009 is unprecedented

Chart 6 Payment periods and trade credit balance, 1999-2007 and 2007-2009

(change in no. of days, calculated on an enterprise basis)



Source: Banque de France – Payment Period database extracted from FIBEN – November 2010.

(Chart 6). For all companies taken together, payment times declined more in two years than during the previous eight. The average length of customer credit contracted by 5 days over a two- year period, having fallen by 4 days between 1999 and 2007 (i.e. an average of 0.5 days per year). The same applies to supplier credit, with a substantial saving of 6 days between 2007 and 2009, equivalent to all the savings made during the period 1999-2007.

…and the largest firms are changing their practices

The faster decrease in payment periods clearly highlights the sharp impact of the LME on the payment practices of most companies. In particular, there has been a radical change of behaviour among non-SMEs.

Until 2007 the bulk of French companies' efforts to manage their payment periods more efficiently was made by the SME sector. Because the reductions they obtained from customers were slightly shorter than those they were granting, SMEs had been unable to prevent their working capital requirement from growing; they thus shouldered a greater part of the trade credit financing burden (in all, one additional day of sales between 1999 and 2007). From 2007 to 2009 the time gap between customer and supplier credit narrowed by 30% for SMEs, allowing them to rein in this upward trend in their trade credit balance.

Since 2007, for MTEs and large enterprises, the reductions are more evenly balanced between customer and supplier credits; they are also unprecedented in scale. These companies have reduced their DPO much more significantly than in prior periods, with declines identical to or greater than those achieved for DSO. In the previous period between 1999 and 2007, the situation was the reverse: the decline in MTEs' accounts payable remained 2 days less than the decline in accounts receivable. As for large companies, they stepped up their efforts to reduce accounts payable, with a remarkable gain of 7 days of purchases between 2007 and 2009. Because this decline was larger than that for accounts receivable, it affected the companies' cash-flow benefit.

Broadly, the reduction in payment periods generates cash earnings

By simulating, between 1990 and 2009, the possible impact of all companies adopting a 60-day maximum payment period, it is possible to put a figure for each year on the potential amount of financial transfers. The findings confirm the extent of the gradual financial shifts stemming from the decline in payment periods (Appendix 3 for the method, and Table 5).

The simulation underscores the potentially positive impact of normalised payment periods on companies' net cash expenses, with gains of some EUR 2 billion already recorded in 2008 and in 2009. The outstanding receivables and payables associated with payment periods in excess of 60 days are still substantial – an estimated EUR 97 billion and EUR 89 billion respectively at end-2009 – but their levels have declined in the space of a year.

Thus the entry into force of LME has not had an adverse effect on companies. It has actually generated additional cash resources by reducing trade credit. Another of the law's positive and expected outcomes has been a decline in the level of commercial risk within the French economy.

These transfers have been assessed on the basis of each company's balance sheet, in particular to ensure that the data are comparable with the results already obtained. That said, a substantial portion of these transfers take place between subsidiaries of the same company, and would not therefore show up in a measurement based on each company's aggregate accounts.[5] Nonetheless, these transfers are macroeconomically meaningful because they reflect very real movements in financing resources and requirements, as recorded in the parent company accounts.

5 *The artificial increase in sales resulting from the organisation of production at group level is part of the reason why this estimate of transfers is much lower for enterprises than for legal units.*

Table 5 Accounts receivable and payable beyond 60 days, analysed by class of DSO and DPO associated with each legal unit

(EUR billions)

Outstanding accounts receivable						
... by DPO	**...and DSO**	**1990**	**1999**	**2007**	**2008**	**2009**
Less than 60 days	60 - 90 days	5.1	5.2	9.5	7.7	7.8
	More than 90 days	9.0	11.1	15.1	14.9	14.2
60 - 90 days	60 - 90 days	7.3	8.8	10.7	11.0	8.0
	More than 90 days	15.4	17.8	22.5	23.3	19.3
More than 90 days	60 - 90 days	3.9	6.0	7.3	6.5	6.2
	More than 90 days	25.6	45.0	55.9	55.9	41.5
Total		**66.2**	**93.9**	**121.0**	**119.3**	**97.0**

Outstanding accounts payable						
... by DSO	**...and DPO**	**1990**	**1999**	**2007**	**2008**	**2009**
Less than 60 days	60 - 90 days	6.0	7.3	11.6	11.8	8.5
	More than 90 days	10.8	15.1	26.4	25.8	23.1
60 - 90 days	60 - 90 days	4.3	6.1	9.7	7.6	5.4
	More than 90 days	8.5	13.5	18.0	18.3	17.9
More than 90 days	60 - 90 days	3.2	4.0	4.5	4.0	3.4
	More than 90 days	18.7	34.0	39.3	42.4	31.3
Total		**51.4**	**80.0**	**109.5**	**109.9**	**89.7**
Potential cash earnings in the event of a return to 60 days (outstanding accounts receivable – outstanding accounts payable)		**14.8**	**13.9**	**11.6**	**9.4**	**7.4**
Actual period-on-period cash earnings			**-0.8** (1990-1999)	**-2.3** (1999-2007)	**-2.2**	**-2.0**

Source: Banque de France – Payment Period database extracted from FIBEN – November 2010.

SMEs account for a substantial portion of financial transfers

Estimates have confirmed that SMEs stand to gain most from a reduction in payment periods and were indeed the main beneficiaries in 2009 (Table 6). At end-2009, simply by simulating a return to statutory payment times, they gained an estimated EUR 12 billion, compared with EUR 15.2 billion in 2008. The overall cash funds actually received are valued at EUR 3.2 billion. Comparing the simulations from one year to the next, large companies appear to have incurred a net cash expense of EUR 2.7 billion. Overall, the financial shifts resulting from the further reduction in payment periods that was still feasible at end-2009 are substantial, amounting to EUR 7.4 billion.

In terms of sectors, manufacturers of industrial products and transport equipment benefited from the largest reductions in 2009, with EUR 2.2 billion and EUR 1.1 billion respectively. The support sector (scientific and technical

activities, administrative and support services), which has by far the largest amount of net outstanding trade credit in value terms (EUR 10.1 billion in 2008), saw a relatively moderate impact of EUR 0.7 billion in 2009.

Lastly, the transport sector appears to have been hurt by trends in its payment periods, incurring a net cash expense of EUR 2 billion in 2009.

Table 6 Cash impact (a) of a return to statutory payment times for all legal units (situation at end-2009)

(EUR billions)

Sector	Cash flow gains (+) or losses (-) according to company size and sector if payment periods currently beyond 60 days return to the statutory period							
	End-2008				End-2009			
	SMEs	MTEs	LEs	Total	SMEs	MTEs	LEs	Total
AZ – Agriculture, forestry, fishing	0.0	0.1	0.1	**0.2**	0.0	0.1	0.1	**0.1**
C1 – Manufacture of food products, beverage and tobacco products	-0.3	-0.6	-0.1	**-1.0**	-0.3	-0.7	-0.1	**-1.1**
C2 – Manufacture of coke and refined petroleum products	0.0	0.0	0.0	**0.0**	0.0	0.0	0.0	**0.0**
C3 – Manufacture of computer, electronic and electrical products; manufacture of machinery and equipment	0.8	1.2	0.2	**2.3**	0.6	1.1	0.5	**2.3**
C4 – Manufacture of transport equipment	0.0	-0.7	-2.1	**-2.7**	0.0	-0.3	-3.4	**-3.8**
C5 – Other manufacturing	3.3	1.9	-0.1	**5.0**	1.9	1.2	-0.3	**2.8**
DE – Extractive industries, energy, water, waste management, remediation	0.4	0.6	-1.1	**-0.1**	0.4	0.4	-1.2	**-0.3**
FZ – Construction	3.7	-0.6	1.1	**4.2**	3.6	0.2	0.8	**4.6**
GZ – Wholesale and retail trade; repair of motor vehicles and motorcycles	-0.6	-1.1	-2.1	**-3.8**	-1.0	-1.8	-0.7	**-3.5**
HZ – Transportation and storage	0.6	0.2	-4.2	**-3.4**	0.4	0.3	-2.1	**-1.5**
IZ – Accommodation and food services	-0.4	0.0	0.0	**-0.4**	-0.3	0.0	0.0	**-0.4**
JZ – Information and communication	1.8	1.5	-6.4	**-3.0**	1.5	1.1	-6.0	**-3.4**
KZ – Financial and insurance activities	1.1	0.6	0.2	**1.9**	1.0	0.5	0.6	**2.2**
LZ – Real estate	0.1	0.0	0.0	**0.2**	0.1	-0.1	0.0	**0.0**
MN – Scientific and technical activities, administrative and support services	4.6	3.5	2.0	**10.1**	4.1	3.2	2.1	**9.4**
RS – Services to households	0.0	-0.1	0.0	**-0.1**	0.0	-0.1	0.0	**-0.1**
Total	**15.2**	**6.6**	**-12.4**	**9.4**	**12.0**	**5.1**	**-9.7**	**7.4**

(a) See Appendix 3 for an explanation of how the impact was determined.
Source: Banque de France – Payment Period database extracted from FIBEN – November 2010. NAF version 2 (2008).

Bank debt remains a characteristic of long payment periods

After growing more than 15% in 2008, the bank debt of the companies in the sample contracted by 4% in 2009 to EUR 527 billion. However, the share of total debt borne by companies with payment periods in excess of 60 days is still substantial and almost unchanged from 2008.

In 2009, as in 2008, companies with a DSO of more than 60 days accounted for 40% of total bank debt. There are two possible reasons for this. First, the companies that reduced their DSO are not those carrying a substantial amount of bank debt. Second, the economic problems encountered in 2009 by companies paid belatedly by customers forced them to continue relying heavily on bank borrowing, including in cases where cash was freed up by a reduction in payment periods. In terms of DPO, the concentration of bank debt on companies with payment periods in excess of 60 days is even more noticeable and still stands at more than 60%.

With payment periods shortening, the nexus between accounts receivable (or accounts payable) and substantial bank debt can be seen as a sign that the firms concerned may have weaknesses in their financial structure.[6] However, the link between the level of bank debt and the length of payment periods may also be due to other factors such as investment, profitability or inventories.

6 *Postponing payments beyond the initial settlement date results in a substantial risk of default. According to Altares, the probability of default doubles as from the 15th day of late payment and is multiplied by 6 after the 30th day.*

Appendix 1

Definitions and methodology

Sources

The Banque de France Companies Observatory analyses trends in payment periods and corporate trade credit using the FIBEN database (*FIchier Bancaire des ENtreprises*), created and administered by the Banque de France.

Populated with this information, the Payment Periods database is confined to companies reporting positive turnover. It does not cover the following sectors of activity: "OQ Public administration, education, human health and social work" and "KZ Financial and insurance activities" (except for the sub-category that includes holding companies).[1] Compared with previous years, the data extraction criteria have been broadened, and the survey sample now includes companies with no employees and those that close their annual accounts six months before or after 31 December. At the beginning of November 2010, the Payment Period database for 2009 comprised some 231,000 annual financial statements of companies with revenues in excess of EUR 0.75 million.

Accounting data are used to measure apparent payment periods at year-end, but not payment delinquencies on commercial transactions. The analysed variables do not include advances and down-payments paid to suppliers or those received by customers. These amounts are small in most sectors, although advances from customers play an important role in sectors with a long operating cycle, such as capital goods and construction.

Accounts payable and accounts receivable record not only business-to-business transactions but also transactions between companies and general government, local authorities, households and non-residents. Moreover, the indicators have been cleaned to discard extreme values (i.e. data not falling in the interval [Q1 - 3 standard deviations; Q3 + 3 standard deviations] have been excluded).

Ratios

"Days sales outstanding" (DSO) is the ratio of accounts receivable (including unmatured discounted bills) to sales including taxes (multiplied by 360 to be expressed in days of sales).

1 *Sectors defined in version 2 of the INSEE's NAF nomenclature (2008).*

"Days payable outstanding" (DPO) is the ratio of accounts payable to purchases and other external expenses including taxes (multiplied by 360 to be expressed in days of purchases).

The trade credit balance is the balance of accounts receivable and accounts payable expressed in days of sales (or the difference between the DSO and DPO ratios adjusted for the purchases/sales ratio). It indicates whether the company is a lender or a borrower.

The average of individual ratios (or unweighted average) gives every company the same weighting. This microeconomic approach takes better account of the heterogeneity of individual observations.

The average ratio of payment periods (or weighted average of individual ratios) takes into account the relative economic weight of each company. It is the ratio of total accounts receivable or accounts payable for all companies divided by total sales and purchases (multiplied by 360 to be expressed in days of sales or purchases).

Size definitions

The LME enabling legislation published on 20 December 2008, which defined the statistical concept of "enterprise",[2] uses European Commission definitions to establish company sizes and the four criteria for classifying them, i.e. headcount, sales (turnover), the total assets of legal units and the financial links between these units.

The first three criteria are assessed for each individual enterprise, defined as the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making (defined on the basis of financial links). A financial link is taken into account where it constitutes a holding of at least 50% of the capital of a legal unit.

If an enterprise comprises several legal units (a "multi-legal unit" enterprise as opposed to a "mono-legal unit" enterprise), the parent company accounts of the component legal units are aggregated to define the "enterprise". This approach avoids double counting of units belonging to the same enterprise.

The size categories are as follows:

• Small and medium-sized enterprises: fewer than 250 employees and annual turnover less than EUR 50 million or total assets of less than EUR 43 million.

2 http://www.legifrance.gouv.fr/affichTexte.do;jsessionid=AE22AD6AA9827C20CEBCA70F67427237.tpdjo01v_3?cidTexte=JORFTEXT000019961059&categorieLien=id

• Mid-tier enterprises (MTEs): companies not included in the SME category that employ fewer than 5,000 people and that have annual turnover of less than EUR 1.5 billion or total assets of less than EUR 2 billion.

• Large enterprises: other large companies.

SMEs and MTEs can be mono-legal unit companies or comprise a number of legal units that depend on a French or foreign lead company.

The SME category has been broken out into "small enterprises" and "medium-sized enterprises" using the thresholds recommended by the French national statistical council, CNIS. "Small enterprises" are also subdivided into "very small businesses" ("VSB SEs") and "other small enterprises ("non-VSB SEs"):

• Very small businesses (VSB SEs): between 10 and 19 employees, with annual turnover or total assets between EUR 2 million and EUR 10 million.

• Other small enterprises (non-VSB SEs): between 20 and 49 employees, with annual turnover or total assets between EUR 2 million and EUR 10 million.

• Medium-sized enterprises (MEs): between 50 and 249 employees, with annual turnover between EUR 10 million and EUR 50 million or total assets between EUR 10 million and EUR 43 million.

• Details of the micro-enterprise category (fewer than 10 employees, turnover and total assets below EUR 2 million) have not been presented because these companies are not fully represented in the FIBEN database.

Table A1 Number of legal units compared with number of enterprises, as defined in the LME

(sample population in '000 units)

	Size	1999	2007	2008	2009
Legal units	Small/medium	179.5	235.5	238.8	221.2
	Mid-tier	7.3	9.7	9.9	9.2
	Large	0.2	0.3	0.3	0.3
Enterprises	Small/medium	147.6	181.8	182.8	167.2
	Mid-tier	3.7	4.5	4.5	4.2
	Large	0.1	0.2	0.2	0.2

Source: Banque de France – Payment Period database extracted from FIBEN – November 2010.

Statistical indicators

The median is the value that divides the survey population into two equal parts. The first quartile is the value below which 25% of the survey population lies. The third quartile is the value above which 25% of the survey population lies.

Appendix 2

Method for calculating the bias affecting the measurement of payment periods

This calculation estimates the extent to which the annual flow of sales or purchases used in the DSO and DPO ratios is biased upwards or downwards by specific cyclical or interannual phenomena. It relies on a methodology used in 1995 and based on quarterly statistical indicators of activity, on which the structure of the balance sheet data in FIBEN is replicated.[1]

Two parameters are taken into consideration: the level of the bias, which illustrates whether or not it is meaningful, and the direction in which its affects the level of payment periods calculated year on year, thereby increasing or decreasing the amplitude of the observed trend.

Assuming that annual sales Q_A for year A correspond to the sum of quarterly sales for quarters Q_{T1} to Q_{T4}, the amounts of which are linked by quarterly growth rates r_1 to r_4, respectively, it is possible to write:

$$Q_A = Q_{T1} + Q_{T2} + Q_{T3} + Q_{T4} = Q_{T4}\left(\frac{1}{(1+r_2)(1+r_3)(1+r_4)} + \frac{1}{(1+r_3)(1+r_4)} + \frac{1}{(1+r_4)} + 1\right)$$

For a company closing its accounts in the fourth quarter, the bias is estimated by comparing the value of sales divided by 4, $\frac{Q_A}{4}$, to the value of fourth-quarter sales, "Q_{T4}".

Since the growth rates of quarterly sales r_1 to r_4 are not known, they are estimated using a benchmark statistical indicator, namely the sales (turnover) index, or ICA, calculated by INSEE.

The bias is therefore equal to:

$$\frac{\frac{Q_A}{4}}{Q_{T4}} = \frac{1}{4}\left(\frac{1}{(1+r_2)(1+r_3)(1+r_4)} + \frac{1}{(1+r_3)(1+r_4)} + \frac{1}{(1+r_4)} + 1\right)$$

1 "Délais de paiement et solde du crédit interentreprises en 1994", *E. Kremp*, Bulletin de la Banque de France, *October 1995*.

and the results are interpreted according to the following key:

- If $\frac{\frac{Q_A}{4}}{Q_{T4}} = 1$, there is no bias.

- If $\frac{\frac{Q_A}{4}}{Q_{T4}} > 1$, sales are overestimated and payment periods underestimated.

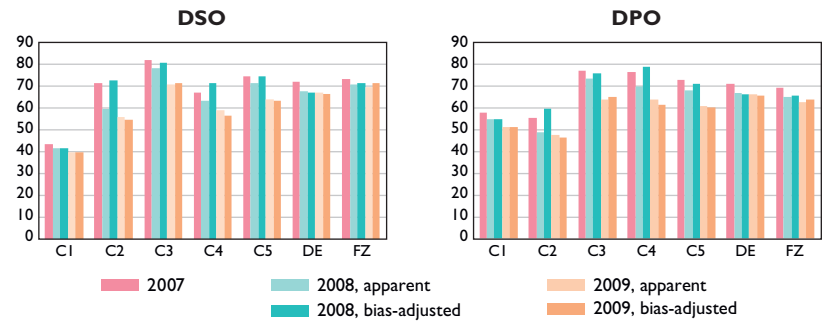
- If $\frac{\frac{Q_A}{4}}{Q_{T4}} < 1$, sales are underestimated and payment periods overestimated.

Key findings

The bias estimate suggests that apparent payment periods were underestimated in 2008 and overestimated in 2009. When this dual impact is taken into consideration, the declines initially observed in 2008 actually occurred in 2009 (Chart A1).

Chart A1 Apparent payment periods/Bias-adjusted payment periods (2008 – 2009).

(unweighted averages of individual ratios, calculated on an enterprise basis; DSO in days of sales, DPO in days of purchases)

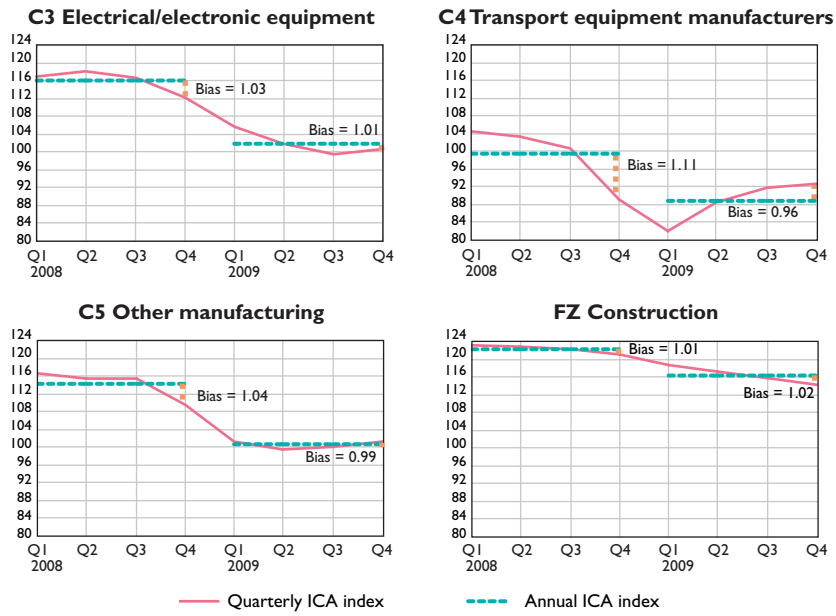


Key – sectors (NAF 2008): C1 – Manufacture of food products, beverage and tobacco products.
C2 – Manufacture of coke and refined petroleum products.
C3 – Manufacture of computer, electronic and electrical products, manufacture of machinery and equipment.
C4 – Manufacture of transport equipment.
C5 – Other manufacturing.
DE – Extractive industries, energy, water, waste management, remediation.
FZ – Construction.

Sources: Banque de France – Payment Period database extracted from FIBEN – November 2010; INSEE (ICA index); Banque de France calculations.

The impact of the bias varies depending on the sector (Chart A2). It is comparatively weak in the construction sector but more pronounced in industry, particularly for transport equipment manufacturers.

Chart A2 Quarterly and annual sales indices, bias estimated for selected representative sectors (2008 – 2009)



Sources: INSEE, Banque de France calculations.

Appendix 3

Impact measurement methodology

Days sales outstanding (DSO) and days payable outstanding (DPO) are calculated respectively in days of sales and days of purchases using company balance sheet data. All payment periods above 60 days are then brought down to this limit. We then calculate, for each company, the shares of accounts receivable and accounts payable that need to be settled in order to reach the ceiling of 60 days. These data are then cumulated by sector and by size.

This methodology assesses the macroeconomic importance of legislation on the reduction of payment periods. It also allows us to identify in detail, by sector and company size, the companies most affected, both positively and negatively, by the new law.

We obtain an estimate of real payment periods by considering that accounts receivable and accounts payable at year-end are a proxy for the amounts renewed from period to period during the year. The renewal periods are estimated by comparing the amounts to sales (DSO) or purchases (DPO).

Provided that the year-end amounts do indeed reflect the regular amounts of accounts receivable and payable during the year, this period measurement is a proxy for the periods as they would be measured in net days by analysing the dates on which invoices were actually paid. This measurement is close to the notion of the payment of the invoice 60 days after receipt. In practice, however, using balance sheet data to measure payment periods overestimates payment periods calculated in net days.

Companies with zero sales or purchases and those with payment periods in excess of 1,000 days are deleted from the sample. The fact that the sample has been cleaned does not make it less representative. By contrast, data excluded from the database during the cleaning phase before the calculation of individual statistical indicators are reincorporated.

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French outward and inward foreign direct investment in 2009
New presentation

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The Banque de France currently compiles and publishes foreign direct investment (FDI) statistics for France according to the methods defined by the 5th edition of the IMF Balance of Payments Manual *released in 1993.*[1] *However, the IMF published a new edition of the Manual in 2008 that will lead to a drastic change in the future methods for compiling and presenting foreign direct investment statistics.*[2] *After briefly explaining the main differences between the two compilation and presentation methods, this article presents an overview and an analysis of French foreign direct investment conducted in accordance with the future international statistical standards.*[3]

Annual direct investment flows drawn up according to these future standards have on average been EUR 30 billion lower since 1999 than those drawn up in accordance with the traditional presentation. In addition, recent developments have been different. Under the new presentation, outward investment flows declined significantly in 2009 compared with 2007 and 2008, returning to a level equivalent to that of 2005. In addition, inward foreign direct investment posted a net outflow in 2009, which had never occurred during the past decade.

Keywords: foreign direct investment, FDI, International Group, balance of payments, international investment position.
JEL codes: E01, F21, F23, F36, G12.

1 *Furthermore, the statistics in the various national and international publications and databases on foreign direct investment comply with the rules in the 5th edition of the* Balance of Payments Manual. *The publications and databases in question include the* STAT-INFO *monthly and the Annual Report on* The French balance of payments and international investment position *published by the Banque de France, the French balance of payments statistics in the IMF's* Balance of Payments Statistics, *the OECD* International direct investment statistics yearbook, *UNCTAD's* World Investment Report, *and the direct investment databases of the Banque de France, Eurostat and the ECB.*

2 *The publication deadline for all European Union countries is 2014.*

3 *The Banque de France now publishes direct investment statistics using this methodology in the Annual Report on* The French balance of payments and international investment position *available at:* http://www.banque-france.fr/gb/statistiques/telechar/bdp/annual-report-balance-of-payments-2009.pdf.

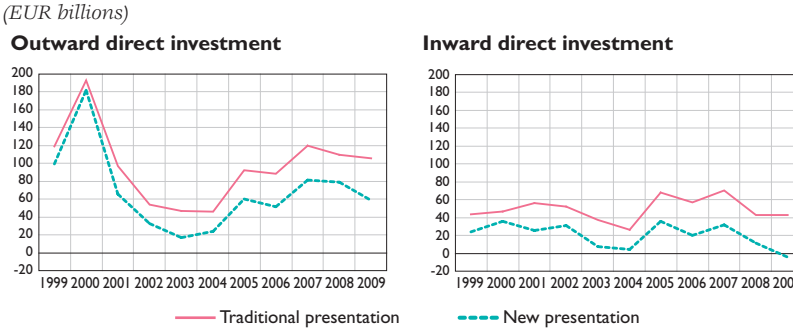
This article analyses direct investment flows (Part 1) and stocks (Part 2) on the basis of a new data series for the period 1999-2009[4] drawn up in accordance with the extended directional principle recommended by the 6th edition of the IMF *Balance of Payments Manual* (see Box and Appendix). Direct investment income is analysed in Part 3.

A new method for compiling and presenting foreign direct investment statistics

The methods for recording inter-company loans in direct investment statistics defined at the start of the nineteen-nineties are still the current dissemination standard. These methods have artificially inflated direct investment flows and stocks, as the international groups have expanded and the use of financing structures located in countries with attractive tax rules started to become more widespread around the middle of the first decade of this century. To remedy to increasing overestimation of direct investment volumes, the OECD and the IMF developed a new method, called the "extended directional principle" method, which consists of reclassifying inter-company loans according to the place of residence (in France or abroad) of the ultimate controlling parent company. This method does not change the net balance of inter-company loans, or the net balance of foreign direct investment, since it merely reclassifies the assets and liabilities recorded using the traditional method. On the other hand, it significantly reduces direct investment flows and stocks (see Charts A and B), insofar as the various lending and borrowing transactions between resident and non-resident companies belonging to the same group are offset.[1] Meanwhile, the impact of the new method on direct investment income is limited to the interest income collected on inter-company debt.[2]

Figures A and B Impact on France's outward and inward direct investment of reclassifying loans between fellow companies according to the extended directional principle rule

(EUR billions)



1 *For more details about these methods, see the methodological appendix at the end of this article and Terrien (2009).*
2 *The French current data collection method does not distinguish interest on inter-company loans from interest on other types of loans, which means that the interest on inter-company loans cannot be compared to the stock of outstanding inter-company loans.*

4 *An upcoming working paper will provide data on direct investment flows, stocks and income for 1999 to 2009, compiled in accordance with the future international methodology, classified by type of transaction, with breakdowns by geographical zone and business sector.*

1| Direct investment flows

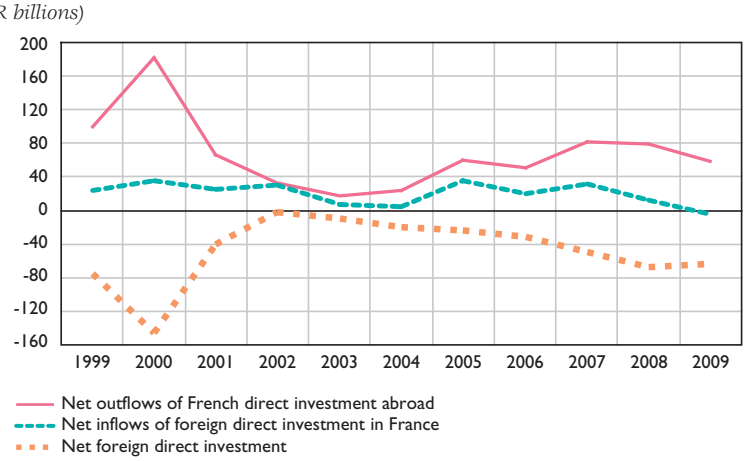
In 2009, direct investment showed a net outflow of EUR 63 billion, compared with EUR 67.5 billion in 2008. However, from a long-term perspective, net outflows remained at a high level in 2008 and 2009. These levels were exceeded only in 1999 and 2000, when the valuation of listed companies resulted in record cross-border M&A activity both in France and abroad (see Chart 1).

1|1 Outward direct investment

After standing close to EUR 80 billion for two years, outward direct investment flows dropped by roughly EUR 20 billion in 2009 (i.e. 26%) returning to their level of 2005. Within direct investment, equity capital transactions (including real-estate investment) fell by 35% in the wake of the world economic slowdown and the sharp drop in cross-border M&A activity; reinvested earnings, which had already posted a significant decline in 2007 and 2008 due to the weaker results of French companies' foreign subsidiaries, continued to decrease to EUR 2.1 billion; lastly, other capital (inter-company loans) picked up slightly to EUR 18.6 billion, after EUR 15.1 billion in 2008 (see Chart 2).

Chart 1 Direct investment flows between 1999 and 2009

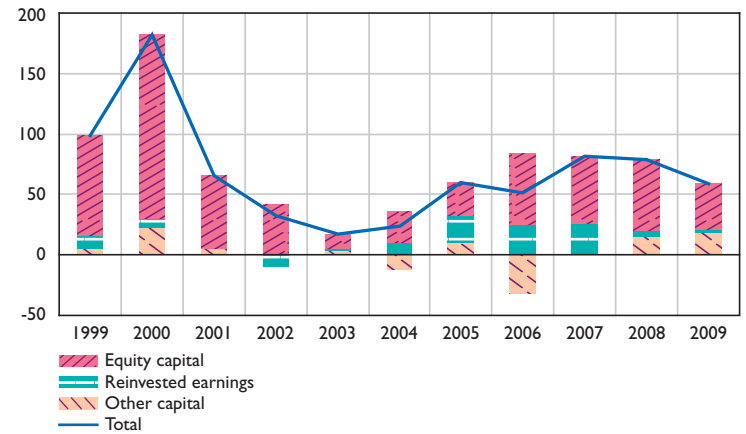
(EUR billions)



NB: to facilitate comparisons with inward direct investment, outward direct investment is presented with an opposite balance of payments sign.

Chart 2 Composition of net outward direct investment flows

(EUR billions)

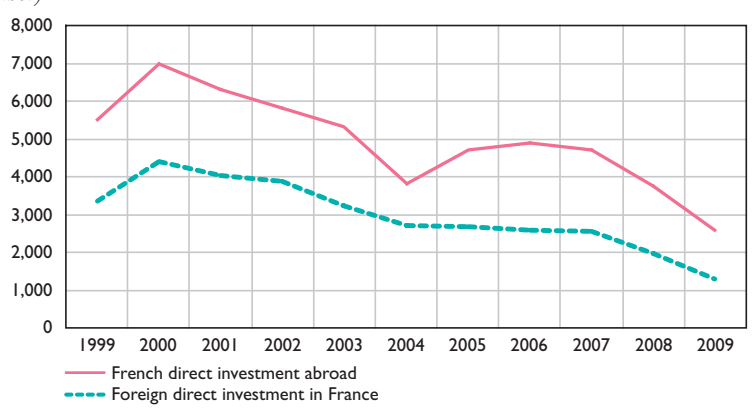


The deterioration in the economic environment and the slowdown in M&A activity in 2009 are not only reflected in the changes in net flows of equity capital transactions but also in the number of investment and disinvestment transactions, which dropped by 31% compared with 2008. In a long-term perspective, this figure is the lowest over the past decade; it is 47% lower than that recorded in 2006, the highest figure of the past five years, and 63% lower than that in 2000 (see Chart 3).

The main outward direct investments in 2009 are: the acquisition by BNP Paribas of three quarters of the capital of Fortis Banque from the Belgian

Chart 3 Number of equity capital transactions (excl. real estate) above EUR 50,000

(number)



government and several transactions conducted by the Électricité de France group in the United Kingdom (takeover of British Energy), in the United States (creation with Constellation Energy of a joint subsidiary specialised in the production of nuclear power) and in Belgium. In addition, the Sanofi-Aventis group made further inroads into the generic drug market by acquiring the Czech company Zentiva and Vivendi launched a takeover bid for the Brazilian telecommunications operator GVT.

From a geographical perspective, according to the immediate counterparty country[5] and all transactions combined, the EU-27 and the other industrialised countries received a large share of outward direct investment in 2009, which amounted to respectively 70% (50% for the euro area) and 12% of net flows, compared with 18% for the rest of the world. Flows towards the euro area are highly concentrated: Belgium and Luxembourg received over 85% of net flows, well ahead of Germany, Ireland and Italy. Among the other countries of the European Union, the main destinations are the United Kingdom, owing to EDF investments, well ahead of the Czech Republic and Sweden. Outside the European Union, the United States, also on account of EDF investments, and Switzerland received 7% and 6% of net flows respectively, while Brazil ranked first among emerging and developing countries with 6% of the total, owing to the Vivendi investments (see Table 1).

The share of emerging countries in total flows remains small, including during the last three years. This can largely be attributed to recording the geographical breakdown according to the first counterparty, which is the basis of the international methodology for direct investment. Although it is difficult to quantify them precisely, a large number of investments made by French groups that are ultimately destined for emerging countries transit through financial subsidiaries located in other industrialized countries such as Luxembourg, Belgium, Switzerland or the United Kingdom.

1|2 Inward direct investment

Inward direct investment, which had ranged from EUR 20 billion to EUR 40 billion between 2005 and 2007, plunged over the last two years to stand EUR 11.7 billion in 2008, representing a 63% drop compared to the previous year, followed by net disinvestment in 2009. Among the various direct investment components, real-estate investment was steady at EUR 4.3 billion in 2009, after dropping sharply in 2008. This steadiness boosted the resilience of the French market in a difficult international environment. According to the estimated data currently available,

5 *See methodological appendix.*

Table 1 Geographical breakdown of direct investment flows since 2007 (according to the immediate counterparty country)

(EUR billions)

		Outward direct investment			Inward direct investment		
		2007	2008	2009	2007	2008	2009
European Union (EU-27)		**-69.1**	**-40.5**	**-41.1**	**31.1**	**6.1**	**-8.0**
Economic and Monetary Union (16 members)		-63.7	-51.2	-29.3	24.6	8.3	-4.3
o/w:	*Germany*	-6.8	0.3	-1.2	10.4	3.1	-5.9
	Belgium	1.5	-43.2	-17.1	5.0	6.9	5.0
	Spain	-6.0	0.9	0.1	3.5	-5.4	-0.2
	Ireland	-0.6	0.0	-0.8	1.0	2.9	-1.2
	Italy	-17.6	-3.6	-0.8	-0.4	-1.0	-0.3
	Luxembourg	-3.4	0.0	-8.4	5.7	-1.0	-2.9
	Netherlands	-29.8	-3.8	1.4	-0.5	1.2	1.5
Other EU countries		-5.4	10.7	-11.7	6.5	-2.2	-3.7
o/w:	*Poland*	-1.0	-0.3	-0.7	-0.3	0.6	-0.3
	Czech Republic	-0.7	-0.8	-1.4	-0.1	-0.1	0.4
	Romania	-0.7	-1.1	-0.4	-0.1	0.1	0.1
	United Kingdom	-1.6	16.6	-8.0	6.2	-3.1	-3.5
	Sweden	-0.1	-2.9	-1.4	0.1	-0.1	-0.4
Other industrialised countries		**-4.4**	**-11.4**	**-7.1**	**0.2**	**6.6**	**0.0**
o/w:	*United States*	-12.5	-12.1	-3.9	1.2	4.1	0.5
	Japan	-0.4	-0.1	0.1	0.1	1.1	0.4
	Switzerland	0.8	0.7	-3.8	1.4	1.3	-0.5
Rest of the world		**-8.3**	**-27.3**	**-10.6**	**0.7**	**-1.0**	**3.8**
Total		**-81.7**	**-79.2**	**-58.8**	**32.0**	**11.7**	**-4.3**

reinvested earnings posted a positive balance of EUR 2.1 billion in 2009, after posting a negative balance in 2008. Equity capital transactions, excluding real-estate investment, which had already been small in previous years, were down by 29% compared to 2008, at EUR 7.7 billion. Finally, "other capital" transactions posted a net negative balance of EUR 18.3 billion, which represented a very large increase compared to 2008. Given the rules applied to the classification of inter-company loans in this article, the negative balance means that, on the whole, French subsidiaries of foreign groups lent more than they borrowed to their parent companies or non-resident entities of their group in 2009. A similar pattern had already been seen in previous years, especially in 2006 and 2003, but never on the same scale (see Chart 4).

Inward equity capital investment, excluding real-estate investment, also showed a decrease in the number of transactions in 2009, declining by 35% compared to 2008. Over the longer period, this component declined steadily over nine years and its level in 2009 was 71% lower than in 2000 (see Chart 3).

There were few major inward direct investment transactions in equity capital of note in France in 2009. Such transactions appeared more as

Chart 4 Composition of net inward direct investment flows

(EUR billions)

the counterpart to French direct investment transactions abroad, rather than actual investments initiated by investors located in other countries. This was the case for the allocation of BNP Paribas shares to the Belgian government in exchange for its 75% equity stake in Fortis Banque. In another case, two Luxembourg-based investment funds belonging to the American investment bank Goldman Sachs took equity stakes in Eurotunnel after subordinated debt securities previously issued by Eurotunnel were redeemed in shares.

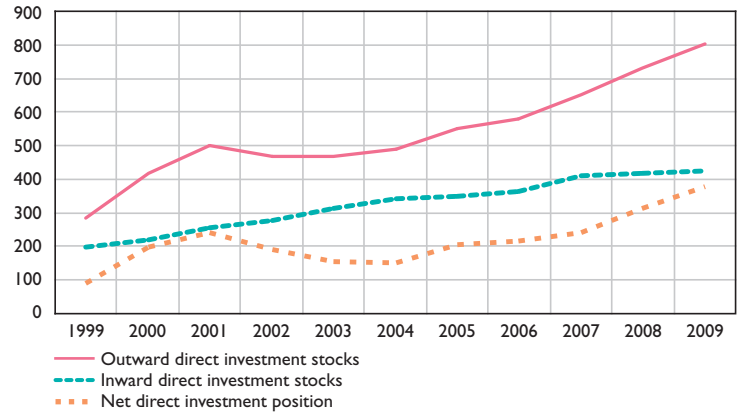
The geographical breakdown according to the immediate investor country principle shows that nearly all countries' direct investment transactions in France in 2009 were close to equilibrium. The three leading investor countries were Belgium, the Netherlands and the United Arab Emirates, but the cumulative amount was less than EUR 10 billion, whereas the countries that made the largest contribution to net disinvestment were Germany (EUR 5.9 billion), the United Kingdom (EUR 3.5 billion) and Luxembourg (EUR 2.9 billion) (see Table 1).

2| Direct investment stocks

At the end of 2009, the net direct investment position at book value stood at EUR 377.7 billion (or 20% of GDP). It was the difference between foreign assets of EUR 802.8 billion and liabilities of EUR 425.1 billion. Since the end of 1999, the France's stock of outward foreign direct investment has increased by a factor of 2.8 and has grown steadily, except for 2002 and 2003, when the "dot-com" bubble burst and flows slowed sharply.

Chart 5 Stocks of direct investment from the end of 1999 to the end of 2009

(EUR billions)



On the other hand, France's stocks of inward foreign direct investment have shown steadier growth since 1999, increasing slightly more than twofold with constantly positive, but slower, growth (see Chart 5).

The reclassification of inter-company loans according to the extended directional principle rule leads to sharp and simultaneous decreases in the stocks of French inward and outward inter-company loans. This means that direct investment stocks are made up almost entirely of equity capital in the presentation used for this article. Equity capital accounted for 87% of outward direct investment at the end of 2009, while real-estate investment accounted for 3% and inter-company loans for 10%. The share of inter-company loans in inward direct investment was even smaller at the end of 2009, at less than 4%, but real-estate investment, boosted by massive purchases and following years of growth, did not decline until 2008 and 2009,[6] standing at nearly 20% of the total.

2|1 Foreign direct investment stocks by sector[7]

At the end of 2009, two sectors accounted for a significant share of outward direct investment: financial and insurance activities, with 31% of the total, of which one fifth was for the activities of holding companies, and

6 *Inward real-estate investment is undoubtedly more accurately tracked than outward real-estate investment, given the legal and regulatory environment.*

7 *The breakdown of direct investment by sector presented here has been compiled for the first time under NAF rev. 2 and backcasted to the start of the period. The sectors used for outward direct investment are the ones of the resident direct investors and the sectors used for inward direct investment are the ones of the direct investment enterprises (see the methodological appendix for more details).*

manufacturing, with 26%. Even though FDI stocks in nominal terms held by French manufacturers have never declined since the end of 1999, with the exception of 2002, their relative share has decreased by 10 percentage points over ten years. On the other hand, the share of financial and insurance activities increased by 13 percentage points between 1999 and 2004, followed by a declining trend after that.

The information and communication sector did not have much of an international dimension at the very beginning of the period. It is now a major investor sector, with 8% of the investments abroad. The wholesale and retail trade and repairs of motor vehicles and motorcycles maintained a steady share of investment of around 6% throughout the period (see Table 2).

The situation for inward direct investment differs little overall, with two dominant sectors at the end of 2009. These were financial and insurance activities, with 31% of the total, of which 40% was for investments in holding companies, and manufacturing, with 24%. The share of direct investment in resident manufacturing enterprises declined by nearly 11 percentage points over ten years, but it is still larger than the share of manufacturing in GDP, showing that direct investors have not deserted this sector of the economy at all. The manufacture of machinery and transport equipment, refining, metal and metal products, wood and publishing are sub-sectors with shrinking shares of total investment over the last ten years, whereas the manufacture of chemicals, motor vehicles and, most importantly, pharmaceuticals have maintained their shares.

Table 2 Foreign direct investment stocks by sector

(as a percentage of the total and in EUR billions for the total)

	Outward			Inward		
	1999	2004	2009	1999	2004	2009
Agriculture, forestry and fishing	0.0	0.0	0.0	0.1	0.1	0.1
All Industries	55.2	38.6	39.0	36.2	27.2	25.8
o/w: Manufacturing	*35.7*	*29.0*	*26.4*	*35.1*	*26.0*	*24.4*
Construction	0.5	0.5	1.5	0.4	0.4	0.4
Wholesale and retail trade; repair of motor vehicles and motorcycles	5.8	5.7	6.5	7.7	5.2	1.3
Transportation and storage	0.7	0.7	0.7	0.4	0.6	0.7
Accommodation and food services	2.0	1.3	1.0	0.4	0.4	1.6
Information and communication	3.8	3.2	8.2	2.0	3.3	5.3
Financial and insurance activities	25.5	38.1	30.9	30.5	35.7	30.6
o/w: Activities of holding companies	*5.0*	*13.4*	*6.4*	*11.1*	*17.4*	*11.9*
Real-estate activities	2.1	2.8	3.7	11.4	16.2	22.2
Business services	2.3	1.8	5.1	1.6	3.2	8.2
Education, human health and social work activities	0.6	2.3	0.2	2.6	1.5	0.6
Unallocated	1.5	5.0	3.1	6.6	6.2	3.2
Total	**286.0**	**490.9**	**802.8**	**197.0**	**341.4**	**425.1**

One distinguishing feature of France's inward direct investment is the share of real estate. Holdings of real-estate assets per se and inward direct investment in the real-estate sector stood at more than 22% of total investment at the end of 2009. This represents a twofold increase in the share of real estate in ten years and a fourfold increase in nominal stocks. Two other major sectors have shown rapid growth since the end of 1999. The business services sector, which includes temporary worker agencies, increased its share of the total from 1% to more than 5%. Meanwhile, the information and communication sector increased its share from 2% to more than 5%. On the other hand, the share of wholesale and retail trade and repair of motor vehicles saw its share decline by approximately 6 percentage points over ten years to just over 1% at the end of 2009 (see Table 2).

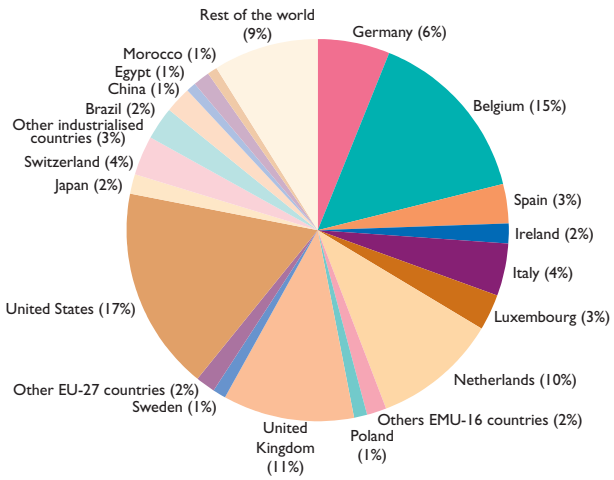
2|2 Geographical breakdown of direct investment stocks

Even though the reclassification of inter-company loans according to the extended directional principle shrank the shares of investment for the main transit countries for investment flows, French investors' preferred destinations for outward direct investment were still the European Union countries, which accounted for 61% of total stocks at the end of 2009. The share of outward direct investment going to other industrialised countries stood at 25% on the same date and the share going to the rest of the world stood at 14%. The United States was, unsurprisingly, the top destination, accounting for 17% of the total, followed by Belgium (15%), the United Kingdom (11%) and the Netherlands (10%). Belgium was the choice of many French groups as a location for their headquarters or their European and global cash management centres. France's leading trading partner, Germany, accounted only 6% of France's stocks of outward direct investment, and Italy accounted for 4%. The leading emerging country, Brazil, accounted for 2% of the stocks and China accounted for only a minor share, with less than 1% of the total (see Chart 6).

Inward direct investment stocks were even more highly concentrated than stocks of outward direct investment. At the end of 2009, the EU countries accounted for three quarters of inward direct investment, with the other industrialised countries accounting for 21% and the rest of the world accounting for only 4%. Inward investment from just six countries: Netherlands, Luxembourg, United Kingdom, United States, Belgium and Germany, accounted for 75% of the total stocks (see Chart 7).

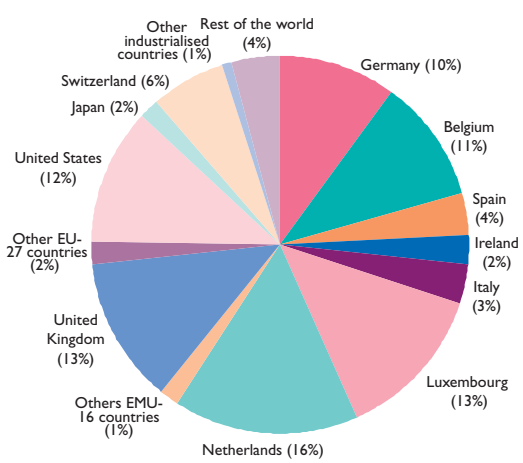
As is the case with flows, the geographical breakdown of direct investment stocks by immediate destination country and immediate investor country does not show the ultimate destination countries or the

Chart 6 Outward direct investment stocks by immediate destination country at end-2009



ultimate investor countries. This means that the breakdown is biased through overrepresentation of hub countries, from which investments are redistributed to other destinations. By allocating all direct investment, including equity capital and inter-company loans, to the ultimate investor country,[8] we correct for this bias. This highlights French groups' large share of inward direct investment stocks, standing at EUR 60.8 billion,

Chart 7 Inward direct investment stocks by immediate investor country at end-2009



8 *The appendix at the end of this article gives a definition of the ultimate investor. A geographical breakdown by ultimate investor could also be made of inward direct investment flows, but this breakdown would be less meaningful than the breakdown of stocks and is not required by the 6th IMF* Balance of Payments Manual.

or 14% of inward direct investment. France's place in the ranks of the leading ultimate investors shows that the adjustments made under the new international standards are still incomplete, since they are only meant to apply to loans between fellow companies. This means that the EUR 60.8 billion in investment attributed to French ultimate investors at the end of 2009 corresponds to investment in equity capital in France by non-resident subsidiaries of French groups or to earnings of non-resident entities of French groups reinvested in their own subsidiaries resident in France.

If we exclude France, the country with the largest increase in its relative share after reclassifying direct investment stocks by the country of residence of the ultimate investor is the United States. The United States ranked fourth among investor countries in France when direct investment is broken down by the immediate counterpart, behind the Netherlands, Luxembourg and the United Kingdom, but, in the breakdown by ultimate investor, it ranks first and its share increases by 7 percentage points to 19%. This is hardly surprising, since American multinational groups have long played a major role in the world and their huge international network of subsidiaries enables them to invest from different regional platforms. The other countries that increased their shares were Switzerland, with a 0.5-percentage-point increase to 7%, Germany with a 2-percentage-point increase to 12% and the United Kingdom, with a 4-percentage-point increase to 17%. On the other hand, the Netherlands, Luxembourg and Belgium saw their share of inward direct investment in France fall to levels that are more consistent with their economic clout and that of their international groups (see Charts 8 and 9).

Chart 8 Inward direct investment stocks by ultimate investory country at end-2009

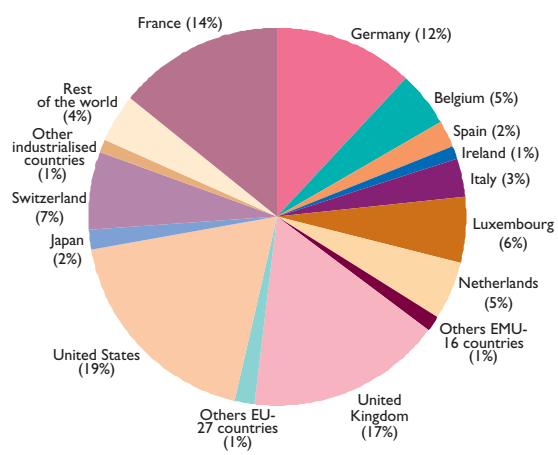
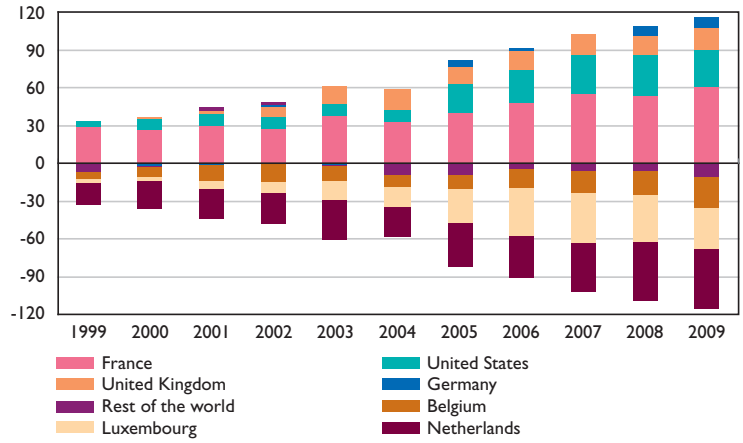


Chart 9 Main disparities between countries after identification of the ultimate investor country

(EUR billions)



An analysis of the data for all years between 1999 and 2009 shows the increasingly large amounts of capital invested in France that have transited through third countries. These amounts rose from EUR 33 billion at the end of 1999 to nearly EUR 110 billion at the end of 2009 (see Chart 9), or from 17% to 25% of total inward direct investment stocks in France. At the start of the period, identifying the country of residence of the ultimate investor revealed the presence of French groups and, to a lesser extent, strengthened the presence of American groups among the ranks of countries investing in France. In recent years, we have also seen that British and German groups make a significant share of their direct investment in France through third countries, especially the Netherlands, Luxembourg and Belgium.[9]

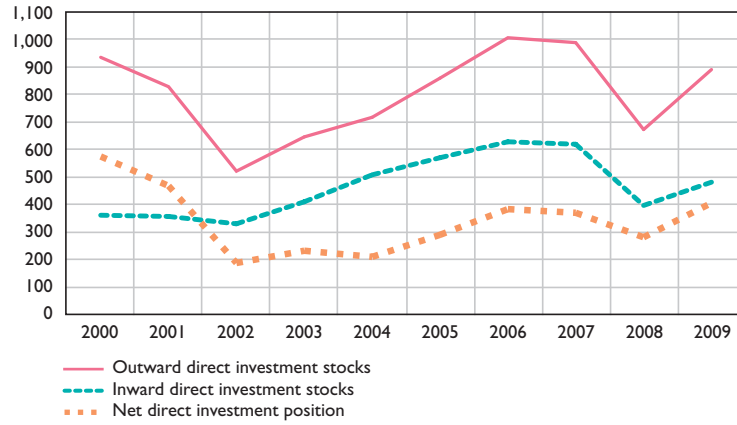
2|3 Stocks of foreign direct investment at market value

The net direct investment balance at market value at the end of 2009 is estimated at EUR 407.3 billion, which represents an increase of nearly EUR 130 billion compared to the end of 2008. This increase can be attributed equally to net direct investment outflows and the price effect, meaning the impact of changes in stock market prices and real-estate prices on the market value of assets and liabilities.

9 *It would, of course, be better to have symmetrical statistics on stocks of outward direct investment by ultimate destination country. But the ultimate destination of funds invested from France cannot be determined using surveys of resident enterprises and other domestic sources. The only way to find such information would be to obtain it from the countries that are the ultimate destinations of the investment. This is not possible at present for legal reasons relating to the confidentiality of data and in view of the current level of international statistical cooperation.*

Chart 10 Direct investment stocks at market value from the end of 2000 to the end of 2009

(EUR billions)



However, it should be noted that plunging stock markets in 2008 caused the net balance at market value to fall by EUR 92 billion between the end of 2007 and the end of 2008, despite net direct investment outflows of EUR 67.5 billion (see Chart 10). At the end of 2009, the market value of France's outward and inward direct investment stocks was once again slightly greater than their book value, in contrast to the situation at the end of 2008, but it was still much lower than the book value multiples seen in 2000 and 2001 or between 2004 and 2007.

3| Direct investment income

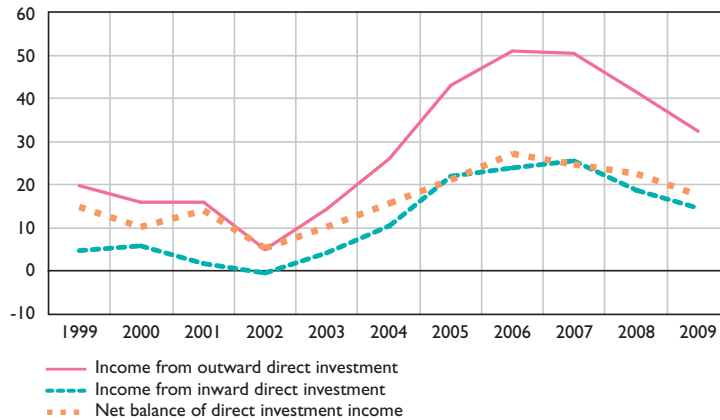
Income from outward direct investment had risen quickly following the end of the "dot-com" crisis in the early years of the decade, partly as a result of improved statistical coverage. It peaked at more than EUR 50 billion in 2006 and 2007, before decreasing by 36% over two years. In the meantime, income on inward direct investment also peaked at more than EUR 25 billion in 2007, and then decreased by 42% over the last two years. All in all, the direct investment income surplus of EUR 17.7 billion in 2009[10] was more than EUR 7 billion smaller compared to 2007 (see Chart 11).

Consolidation of direct investment income shows that income on outward direct investment is highly concentrated. This consolidation involves aggregating the income from all of the companies belonging to the same

10 It should be remembered that the direct investment income figures for 2009 are only estimates and should not be considered definitive.

Chart 11 Direct investment income in the balance of payments from 1999 to 2009

(EUR billions)



group and reclassifying all of the income received or paid by groups where the ultimate investor is resident in France, including reinvested earnings (see methodological appendix), as income on outward direct investment and all of the income received and paid by groups where the ultimate investor is not resident in France as income on inward direct investment. In 2008, the direct investment income of the top 20 French groups came to EUR 32.6 billion, accounting for more than 87% of receipts, while the 36 resident groups in the CAC 40[11] index had combined income of EUR 33.8 billion, representing nearly 91% of net receipts (compared to 89% of net receipts in 2007 and 90% in 2006 and 2005). Between 2005 and 2008, the income from foreign subsidiaries of CAC 40 groups recorded in the balance of payments accounted for nearly 50% of the group's share of net consolidated income, excluding extraordinary items, and even more than 54% in 2008.

Meanwhile, income on inward direct investment appears to be less concentrated than income on outward direct investment. The income of the top 20 foreign investors came to only EUR 7.7 billion (or 52% of net expenditures) and the income of the top 40 foreign investors came to EUR 10 billion, representing barely more than two-thirds of net expenditures. There is nothing surprising about this pattern, which is equally apparent for direct investment flows and stocks. It stems primarily from the fact that it is harder for us to determine the structure of foreign groups than it is to determine the structure of French groups. It also stems from the fact that, in the case of outward direct investment, we measure

11 Meaning the list of companies in the CAC index on 31 December 2008, except for Arcelor Mittal, Dexia, EADS and ST Microelectronics.

concentration within a small group of direct investors, whereas, in the case of inward direct investment, we have measured the concentration of investment in a limited territory, France, by a worldwide population of direct investors.

France is currently one of the few countries to publish direct investment statistics in compliance with the future international standards. This means that these statistics cannot be compared directly to those of our partners. The entry into force of the new methodology prescribed by the IMF and the OECD should provide a set of national statistics that are more meaningful than at present and easier to compare.

Appendix

Foreign direct investment: concepts and definitions

Definition of direct investment

The Banque de France compiles France's direct investment statistics using the conceptual framework that the IMF defined for compiling the balance of payments and the international investment position in the *Balance of Payments Manual* (fifth edition published in 1993 and sixth edition published in 2008). Direct investment is international investment where a resident entity in one economy acquires or holds a lasting interest in an entity resident in another economy. The lasting interest implies a long-term relationship between the direct investor and the direct investment enterprise and a significant degree of influence by the investor on the management of the enterprise. Direct investment covers both the initial transaction between the two entities and all subsequent financial transactions between them.

According to convention, direct investors are deemed to hold a lasting interest in an entity when they own at least 10% of the equity or the voting rights in an enterprise that is resident in another country. Direct investment statistics include all of the financial transactions between enterprises deemed to be in a "direct investment relationship". These statistics cover transactions between companies that are indirectly linked, as well as transactions between companies with direct ownership links that meet the 10% criterion. This means that a financial transaction between a company and a subsidiary that is more than 10% owned by majority-owned subsidiary of the first company counts as direct investment, even though there is no direct ownership link between them. Similarly, all of the financial transactions between fellow companies, meaning companies where the same ultimate investor directly or indirectly owns more than 10% of the equity, but that do not have direct ownership links between them, count as direct investment.

Therefore, direct investment covers more than just purchases of equity interests. It also covers real-estate investment, reinvested earnings (the portion of earnings that is not distributed to direct investors in the form of dividends on the current income of direct investment enterprises) and all of the loans and deposits between resident entities and their non-resident affiliates (parent companies, directly and indirectly owned subsidiaries and fellow companies).[1]

1 *For more details about the notion of residence, the links between direct investment and investment in the system of national accounts, populations of direct investment enterprises and data collection methods, see Nivat and Terrien (2009).*

Geographical breakdowns

According to the IMF balance of payments methodology, geographical breakdowns are made according to the immediate counterpart's country. This means that the country considered to be the destination for the investment is not the ultimate recipient of the funds invested, but the country that receives the funds when they first leave France. Consequently, a French investment in China made through a Dutch subsidiary is counted as French outward direct investment in the Netherlands. This rule applies to direct investment flows and stocks compiled according to the traditional method as well as flows and stocks presented in this article, which are complied according to the extended directional principle rule.

In the case of inward direct investment stocks, however, we can make an additional geographical breakdown that is entirely based on the ultimate investor criterion. This breakdown allocates the equity stocks of its resident subsidiaries to the country of residence of the ultimate controlling parent, along with the stocks of loans and cash flows between the French and foreign subsidiaries of the same group. The ultimate investor is defined as the entity that is origin of the chain of majority ownership links that make up a group. Ultimate investors (or ultimate controlling parents) are identified to get a clearer idea of who ultimately owns and controls resident enterprises in direct investment relationships.

Breakdowns by sector

The breakdown by sector is made according to the activities attributed to the resident entities, which are identified by the SIREN statistical code number in the company register kept by INSEE, France's national statistics institute. The breakdown of outward direct investment is made according to the activities of the resident direct investors and the breakdown of inward direct investment is based on the activities of the resident direct investment enterprises. Direct investment flows and stocks in 2009 were compiled for the first time using a new activity classification that came into force on 1 January 2008 (NAF rev. 2 or NAF 2008). Data from previous years, which were originally published according to NAF rev. 1, were restated for the purposes of comparison. In order to make the breakdown by sector more meaningful, holding companies are reclassified according to the business sector of the ultimate controlling parent, if the parent is a listed company. In order to have a sector structure that was in line with those used by stock market indexes, the Industry Classification Benchmark (ICB) was chosen as the standard system for reclassifying investor holding companies.[2]

2 *The ICB is a sector classification system that was created jointly by Dow Jones and FTSE. It is the standard used to define the business sectors of companies listed on several stock markets that account for approximately 65% of global market capitalisation, including Paris and New York (Euronext-NYSE), along with London. The benchmark is used for the sector indices provided by most of the world's leading stock markets.*

Valuation of stocks of direct investment

Unless otherwise indicated, direct investment stocks presented in this article are expressed at book value. The equity capital data relating to direct investment enterprises are taken from their financial statements. The market value of direct investment stocks is also mentioned, but only for the overall amount and not in the breakdowns by geographical zone or sector. In the case of unlisted companies, the market value of equity capital is estimated using the "capitalisation ratio" method, which calculates median ratios based on the ratio of stock market capitalisation to consolidated equity capital for populations of listed companies and then applies these ratios, subject to certain conditions, to the stocks of equity capital at book value.[3]

Direct investment income

Direct investors receive income from their direct investment enterprises. This income is made up of the current operating income of the direct investment enterprises, which excludes non-recurring items such as foreign exchange gains and losses, gains and losses on asset disposals, etc. This income is made up of two parts: one part that is distributed to direct investors (dividends) and another part that is allocated to the reserves of the direct investment enterprises, which increases the investors' equity when it is positive (reinvested earnings). Reinvested earnings are also recorded with the opposite sign in direct investment flows. Direct investment income is a current account item in the balance of payments and it contributes to gross national income (GNI) in the system of national accounts. Consolidation of direct investment income, which is discussed in the third part of this article, is based on the successive annual versions of the LiFi database on financial links between companies provided to us by INSEE, France's national statistics institute.

The main changes to direct investment statistics resulting from the new OECD-IMF methodology

In the "official" statistics of most countries, including France, loans between fellow companies (meaning enterprises with no direct ownership links between them or where one owns less than 10% of the equity capital in the other) are recorded under the asset/liability principle. Loans made by resident companies to non-resident fellow companies are counted as outward direct investment, while loans from non-resident companies to French fellow companies are counted as inward direct investment.

3 *For details about the method used, see Nivat and Topiol (2010).*

This rule did not raise any particular problems when the current methods for compiling and recording balance of payments flows and international investment position stocks were first defined, but, today, it inflates direct investment because of the creation and growth of special purpose entities (SPEs). Some of these entities were created by international groups to provide the necessary financing to the other companies belonging to the group by issuing securities on international markets or by obtaining bank loans. These structures are usually not located in the country where the ultimate investment is made. In this case, the funds are transferred from the countries where they have been raised to countries where they will be used, with a possible detour via the group's home country or a third country. Each transfer of funds corresponds to an inter-company loan that is recorded as direct investment. SPEs may also be given the task of centralising the group's disposable cash. In this case, they receive funds from companies with cash surpluses and distribute them to companies with borrowing needs. All such transactions are recorded as direct investment transactions.

SPEs also affect direct investment through payment transactions, as in the case of an acquisition by one country in another country that gives rise to payments made to or from cash management centres located in a third country. This disconnection of real transactions from payment flows is all the more pronounced as the degree of regional economic and financial integration increases. Consequently, the disconnection is very pronounced in Europe. Overall, SPEs artificially inflate direct investment flows and stocks by multiplying the loans between companies belonging to the same group and located in different countries.

The OECD and the IMF defined a new method called "extended directional principle," which is set out in the OECD *Benchmark Definition of Direct Investment*, 4th edition (2008) and in the IMF *Balance of Payments Manual*, 6th edition (2008). The new method is intended to reduce the overestimation of direct investment. According to this method, loans between fellow enterprises should be reclassified according to the residence of the ultimate controlling parent.[4] When the parent is a French company, all of the inter-company loans, regardless of direction, are considered to be outward direct investment, which is positive or negative, depending on whether we are dealing with assets or liabilities. When the ultimate controlling parent is a foreign company, the loans are recorded as inward direct investment, with different signs for assets and liabilities. All of the data series on direct investment flows and stocks presented in this article were compiled using the new methodology.

4 *The 5th edition of the IMF* Balance of Payments Manual *(1993) recommended the directional principle method only for inter-company loans between parents and subsidiaries.*

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The future of monetary policy
Summary of the conference held in Rome on 30 September and 1 October 2010

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What lessons can be learnt from the financial and economic crisis for the strategy and conduct of monetary policy? To analyse and debate this topic, more than eighty participants, chiefly from Europe and the United States, mostly professors of economics at prestigious universities or central bank economists, came together in Rome on 30 September and 1 October 2010. This conference was the fruit of collaboration between the Banque de France, the Banca d'Italia and its research institute, the Einaudi Institute for Economics and Finance. It provided a forum for the presentation of a number of studies about the various aspects of this question, including the role of central banks in maintaining the smooth functioning of the interbank market, the effectiveness of the non-standard monetary policy measures adopted during the crisis, the interaction between monetary policy and macroprudential policy, and the role of macroeconomic stabilisation policies during periods of "excessive" credit expansion.[1]

The conference lasted two days and included two presentations by prominent academics, the first by Professor Michael Woodford from Columbia University in New York and the second by Professor Markus Brunnermeier from Princeton University in New Jersey. A number of research papers were presented by their authors and discussed by two selected experts before an open debate with the audience. The conference closed with a round table debate between Mario Draghi (Governor of the Banca d'Italia), Charles Evans (President of the Federal Reserve Bank of Chicago), Christian Noyer (Governor of the Banque de France) and Athanasios Orphanides (Governor of the Central Bank of Cyprus) on "The future of monetary policy".

This article summarises the main questions that dominated the presentations, discussions and debates, namely: are monetary policy and liquidity management always independent from each other? Should monetary policy preserve financial stability? Should monetary policy react to asset price bubbles? And, more generally, what is the future for monetary policy?

Keywords: asset price bubbles, financial crisis, interbank market, macroprudential policy, monetary policy.
JEL codes: E3, E4, E5, E6, F4, G1, G2.

1 *The conference's programme and its papers may be consulted online at:* http://www.banque-france.fr/gb/publications/seminaires/the_future_of_monetary_policy.htm.

1| Are monetary policy and liquidity management always independent from each other?

The first session of the conference, entitled "Monetary policy and liquidity", focused on monetary policy implementation in a liquidity crisis context. Its primary objective was to highlight the operational challenges facing central banks in such situations and to examine the effectiveness of their available tools. The two articles in this session analysed the conduct of monetary policy in the euro area and in the United States respectively.

In their contribution, Achim Hauck and Ulrike Neyer (Heinrich Heine University, Dusseldorf) examine the implementation of the Eurosystem's monetary policy during the crisis after the collapse of the investment bank Lehman Brothers. To that aim, the authors develop and use a model designed to reflect the principal characteristics of an operational framework based on an interest rate corridor. In such operational frameworks, commercial banks can refinance themselves either by obtaining liquidity directly on the interbank market or by borrowing from the central bank. In the latter case, they can either make permanent use of the central bank's marginal lending and deposit facilities – but on less favourable terms than those offered by the market – or they can participate in the central bank's weekly tender operations. The authors show that when interbank participation costs rise, the central bank's intermediation increases. At the height of the crisis, participation costs – mainly reflecting transaction and monitoring costs in situations where information on counterparty credit risk is imperfect – became prohibitive. This led to a near seizure of the interbank market, characterised notably by a sharp fall in transaction volumes and prompting the Eurosystem to stand in for this failing market. The authors also explain, in this context, why certain banks made such heavy use of the central bank deposit facility. In their view, any measures that might be taken by the Eurosystem to reactivate the interbank market which imply an increase in its funding costs may prove inconsistent with the desired monetary policy stance.

Xavier Freixas (Pompeu Fabra University), Antoine Martin and David Skeie (both at the Federal Reserve Bank of New York) conducted a similar study focused on the reaction of the Federal Reserve System. Their analytical framework introduces an uncertainty about the distribution of liquidity desired by the banking system. The authors examine the optimal monetary policy response in this framework. They show that when banks are confronted with a shock that impacts the distribution of liquidity within the banking system engendering

substantial liquidity differentials between them, the central bank should lower its target interest rates. This is precisely what happened in the United States and Europe. The objective of this easing is to prompt banks to lend to each other at reasonable rates and thereby relieve tensions in the interbank money market. Such action, however, implies that in a crisis situation, monetary policy can no longer be conducted without financial stability considerations. The paper also shows that following an aggregate liquidity shock, the central bank should try to attenuate its impact by adjusting market liquidity. They therefore recommend that central banks should use two different instruments depending on the nature of the shock affecting the interbank market: interest rates in reaction to a shock affecting the distribution of liquidity within the banking system, and liquidity injections in response to generalised liquidity shocks. The authors therefore suggest that maintaining the separation principle in times of crisis – which recommends that central banks use interest rates exclusively to contain risks to price stability – would pose a risk to financial stability by raising the likelihood of bankruptcies and hence of bank runs.

2| Should monetary policy preserve financial stability?

2|1 Sources of financial instability

2|1|1 The risk-taking channel

One session focused on the analysis of the factors and mechanisms that tend to destabilise the supply of credit. Here, Luisa Lambertini (*École polytechnique fédérale*, Lausanne) presented a model explaining how excessive mortgage lending may arise. The primary objective of this study is quantitative. Can the magnitude of the recession experienced in 2008 and 2009 be explained by a sudden change in lenders' risk assessment and an increase in the proportion of borrowers likely to default? The model underscores the transmission mechanism via which borrowers' defaults lead to a contraction of housing prices. The latter reduces the borrowing capacity of home-owners and subsequently their consumption and investment spending. However, according to this model, the macroeconomic impact of this phenomenon is limited as it produces only a relatively shallow recession. It is in fact likely that other mechanisms, not covered by this model, such as a confidence channel and a collapse of trade, have played an important role in the amplification of the financial crisis.

2|1|2 The optimal level of credit and the effectiveness of macroprudential policy

Anton Korinek (Maryland University) presented a paper co-written with Olivier Jeanne (Johns Hopkins University) on the design of economic policy to manage credit and asset price cycles. A financial accelerator mechanism is at the heart of their model. A rise in asset prices eases private agents' borrowing constraints, allowing them to spend more and thereby fuelling the rise in asset prices further. In the absence of public intervention, individual borrowers do not internalise the effects of their decisions on prices and so subsequently suffer the effects of exposure to cycles of excessive lending. A macroprudential policy should take the form of a "Pigouvian" tax on borrowing. Such a tax would prompt issuers of debt to internalise this externality and would thus contribute to the collective welfare. The model used by the authors is calibrated using data for American households and SMEs (small & medium enterprises). The optimal tax would be counter-cyclical, dropping to zero at the bottom of the cycle and increasing to approximately half a percentage point of the amount of debt at the top of the cycle.

In their contribution, Gianluca Benigno (London School of Economics) and his co-authors partially question the wisdom of a macroprudential policy aimed at preventing the sort of over-borrowing that leads to a financial crisis. First, from a qualitative point of view and somewhat counter-intuitively, they demonstrate that the existence of an occasionally restrictive credit constraint does not systematically lead to overborrowing (vs. an optimal level of debt). Depending on the structure of the economy and the values used to calibrate the model, such a constraint may also lead to underborrowing. Second, from a quantitative point of view, they find that the gains from an optimal public intervention in terms of welfare are higher in times of crisis than in normal times. These two results suggest that the implementation of a macroprudential policy in the form of a prudential tax on capital flows or of capital controls are of limited effectiveness in this class of model compared with ex post public interventions in times of crisis.

2|2 Non-standard monetary policies and macroprudential policies

What are the alternatives to and effects of a combined use of monetary policy and macroprudential policy? These questions were notably discussed in a session dedicated to the macroeconomic impact of non-standard monetary policies and the potential challenges and conflicts relating to the simultaneous use of monetary and macroprudential policy instruments.

Gauti Eggerston (Federal Reserve Bank of New York) presented a qualitative and quantitative analysis of the non-standard monetary policies implemented by the US Federal Reserve. One of the central issues of the analysis is the switch in monetary policy instruments that occurs when the traditional instrument, the policy rate, reaches the zero bound and therefore has no further easing potential. In such conditions, the central bank can augment its supply of money in order to change its relative price by issuing financial instruments that are considered partially substitutable for cash. The study shows the substantial effects of these quantitative easing policies on economic activity as long as two conditions are met: nominal interest rates must effectively be fixed at zero, and the economy must show clear signs of strong nominal rigidities that prevent an adjustment of supply to the level where demand contracted.

The second article of the session, presented by Stefano Neri (Banca d'Italia), focused on the interplay between monetary policy and macroprudential policy. The authors consider two situations. In the first, the authorities responsible for implementing these policies cooperate with each other and coordinate their decisions; in the second, they take their decisions independently in a non-cooperative game. Their two main conclusions should be stressed. First, in most cases, macroprudential policy only has a limited impact on price stability. Thus even in the non-cooperative case, monetary policy usually manages to achieve its price stability objective. Second, the two policy levers are, in effect, complementary in the event of an asset price bubble. Their coordination then allows a simultaneous stabilisation of the financial cycle and of price levels.

3| Should monetary policy react to asset price bubbles?

The mechanism underlying the formation of financial bubbles remains obscure. One of the most frequently evoked theories suggests a strong input from contagion phenomena. In their contribution, Martin Eichenbaum (Northwestern University), Craig Burnside (Duke University) and Sergio Rebelo (Northwestern University) present an original model of property price formation that captures large upward and downward price movements using a somewhat unusual representation of the notion of economic contagion. In fact, their approach is inspired by an epidemiological model. In this model, "optimistic" agents meet agents who are indecisive about the nature of their economic environment and "contaminate" the latter with their optimism. These optimistic agents have a

certain likelihood of subsequently returning to an indecisive state of mind. In this framework, expectations about the developments in property prices follow a non-linear upward dynamic, followed by a fall. This dynamics of expectations is introduced in a model of property market prospection and matching. The authors show that the model faithfully reflects the dynamics of the key variables on the US property market.

Another paper, presented by Olivier Loisel (Banque de France), joint with Aude Pommeret (Lausanne University) and Franck Portier (Toulouse School of Economics), focused on the role of monetary policy when asset price bubbles result from herd behaviour. Entrepreneurs may massively adopt a new technology whose productivity is uncertain at the time the investments are made (for example, the Internet technology in the 1990s). Herd behaviour is due to an "informational cascade": if the first entrepreneurs receive encouraging private signals about the productivity of the new technology and therefore invest in this new technology, then all the subsequent entrepreneurs will rationally choose to invest in the new technology too, irrespective of their own private signal. A tightening of monetary policy that raises borrowing costs for entrepreneurs can then prompt them to invest in this new technology if and only if they receive an encouraging private signal about its productivity. This tightening of monetary policy then interrupts entrepreneurs' herd behaviour, by forcing them to act on the basis of their own private information, and therefore interrupts the asset price dynamics due to herd behaviour. Such a policy can be implemented even when the central bank knows less about the productivity of the new technology than each entrepreneur. And, in certain cases, because it "insures" the economy against the consequences of bad surprises vis-à-vis the actual productivity of the new technology, it may be ex ante preferable in terms of social welfare to the *laisser-faire* policy.

4| The future of monetary policy

What have we learned from the crisis and what are the lessons for the future strategy, conduct and implementation of monetary policy? To reply to this question, two eminent specialists, Michael Woodford and Markus Brunnermeier, put forward their views in two open presentations. This was followed by a closing panel that drew up a first assessment and offered some preliminary perspectives on these questions.

4 | 1 Should the current monetary policy strategy be amended?

4|1|1 Inflation targeting and financial stability

Michael Woodford (Columbia University) referred to the conclusions of his ongoing research with Vasco Cúrdia (Federal Reserve Bank of New York) to support the notion that the inflation targeting strategy could and should be adapted to take into account the possibility of financial crises. Monetary policy should respond to changes in financial conditions during a crisis. For example, key rates should be lowered proportionally to the rise of interest rate spreads on markets. This does not imply a change in monetary policy objectives (which, in the framework of a flexible inflation targeting strategy, are expressed in terms of inflation and output gap), but requires the use of a forecasting model that takes into account the macroeconomic implications of financial frictions. Moreover, monetary policy has a role to play in the prevention of financial crises, alongside other policies that are not totally effective in this respect. The role of these policies is not to detect asset price bubbles and to eliminate them, but rather to discourage extreme financial debt phenomena that represent a risk for financial stability. In the case of monetary policy, this financial stability objective may, from time to time, be inconsistent with the price stability objective; but such inconsistencies would in fact be very similar to those already existing, in the framework of flexible inflation targeting, between stabilising inflation and stabilising the output gap. Michael Woodford recognised that such a strategy could be considered equivalent to the ECB's "two-pillar" strategy, but he pointed to two major differences. Monetary analysis should be used to identify the risks to financial stability and not those to long-term price stability. And it should not be based on an analysis of the growth rates of monetary aggregates, but rather on signs of systemic risk.

4|1|2 A new role for money

Markus Brunnermeier (Princeton University) proposed a new model of a monetary economy that includes financial intermediaries. In this model, households invest their savings in financial assets provided by financial intermediaries. The latter lend to entrepreneurs with financial frictions. The specificity of this new approach is that it is conducted in general equilibrium and continuous time, without linearising the model around a stationary equilibrium. This approach has precisely the advantage of highlighting the financial instability phenomena, the multiple equilibria and the non-linearities that characterize periods of crisis. Markus Brunnermeier demonstrates, in the framework of a flexible price monetary model, the existence of a deflationary spiral. A contraction

in agents' wealth can lead to a decline in credit and a lower level of intermediation, which, in turn, lead to a fall in prices. He then compares the properties of this model with those of a standard New-Keynesian model to emphasize the advantages of his focus on financial intermediaries.

4|2 How to combine the monetary stability and financial stability objectives?

The conference ended with a round table on "The future of monetary policy", in which four central bank governors or presidents took part: Mario Draghi (Banca d'Italia), Charles Evans (Federal Reserve Bank of Chicago), Christian Noyer (Banque de France) and Athanasios Orphanides (Central Bank of Cyprus).

Mario Draghi addressed two topics. The first concerned the non-standard monetary policy measures used by the Eurosystem during the crisis. Mr Draghi started by stressing the very positive impact of these policies on economic activity in the euro area and Italy. Without them, the drop in production would have been substantially greater. Mr Draghi went on to underscore the high risk inherent to the exit from non-standard monetary policies: some fragile banks have become particularly dependent on the support provided by the Eurosystem. Consequently, if the problems posed by fragile banks were not promptly solved by national authorities, the exit from these non-standard policy measures could destabilise such banks and engender systemic risk. Mr Draghi made it clear that the national authorities should provide assistance to these banks.

The second topic discussed by Mr Draghi was the interplay between monetary policy, macroprudential policy and financial stability. First, although Mr Draghi recognises that central banks should monitor a broader range of indicators, including credit growth and financial intermediary leverage, he does not believe that this requires a change in the mandate of central banks. Lastly, he expressed the view that macroprudential policies should allow a greater capacity of loss absorption for the financial sector. This could be made possible by, for example, contingent capital or capital adequacy ratios varying over time.

Charles Evans discussed the question of the appropriate monetary policy stance for the United States in the current situation, where short-term interest rates are close to zero. He began by summarising the economic situation in the United States. The unemployment rate is very high and there is no sign of any significant break in the Beveridge curve, suggesting that a significant proportion of the current unemployment is cyclical

rather than structural. The current economic behaviour of households seems to indicate the presence of a liquidity trap. The savings rate is increasing and has already exceeded demand for private sector funding despite the current low yield on savings. These elements suggest that other monetary policy actions may be necessary in the current situation.

Christian Noyer addressed the relationship between financial stability and monetary stability. Historical examples and recent events show that price stability is a necessary but not a sufficient condition for financial stability. In effect, high and volatile inflation generally leads to substantial fluctuations in asset prices that can destabilise financial markets. Moreover, we have seen the formation of financial imbalances in periods of low inflation. At the same time, the authorities responsible for monetary stability should be concerned with financial stability because of the impact that financial crises can have on prices. Financial and banking crises usually lead to a fall in demand and in inflation that can, in extreme cases, lead to deflation, with enormous costs for the general economy. The second point addressed by Mr Noyer concerned the complementarity between monetary and macroprudential policies. He began by reminding the audience that it is important to establish clear objectives for each of these policies. Monetary policy aims to ensure price stability whereas the objective of macroprudential policy is to maintain financial stability. Then, certain interactions between these two policies can be identified. For example, macroprudential policy can have an impact on inflation via the volume of credit. Inversely, monetary policy can raise investors' risk appetite when interest rates are low. Governor Noyer stressed that additional research that would improve our understanding of the interaction between monetary and macroprudential policies is warranted.

Lastly, Athanasios Orphanides stressed that, to understand the future of monetary policy, we should first look at its recent past. In this domain, he emphasised, questions relating to financial stability have progressively disappeared from monetary policy debates. He attributes this state of affairs to the limits of the tools of monetary macroeconomics used by central banks and by a large part of the academic community. Professional economists have insisted on the internal coherence of models and on the question of micro-foundations, sometimes at the expense of mechanisms that are more difficult to model but nevertheless essential for the conduct of monetary policy. For example, the question of the link between monetary policy and international current account imbalances, which are typically left out of the most widely used monetary policy models, is crucial. Mr Orphanides therefore invited the academic community and central bank economists to address more directly the articulation between monetary stability and the determinants of financial stability.

At the tail-end of a financial and economic crisis of a severity unmatched since the Great Depression, the quality and diversity of the works presented and discussed during this conference reflected the dynamism of current research on the topic of the future of monetary policy. The conference was therefore an excellent opportunity for a fruitful exchange between researchers and economic policy-makers on this topic.

Two main preliminary conclusions can be drawn from the discussions that took place.

Firstly, it is essential to pursue the considerable research effort into understanding the complex mechanisms underlying the formation of financial imbalances and at work during financial crises. This should allow the implementation of the most appropriate cyclical and structural economic policies in order to prevent the formation of such imbalances and to respond to such crises. In particular, to the extent that these mechanisms introduce an externality such as a financial accelerator or herd behaviour, intervention by the public authorities may be justified even if these authorities do not have any informational advantage over the private sector concerning the fundamental value of financial assets.

Secondly, a consensus seems to have emerged in support of the idea that the recent economic and financial crisis does not call for a fundamental change in central bank mandates or in the current strategic framework of monetary policy. However, the crisis calls for a better integration of considerations about financial conditions and financial-crisis risks in the implementation of this monetary policy strategy. Moreover, central banks will soon have to take into account the potential interactions between monetary policy and macroprudential policy in their conduct of monetary policy, both in normal times and in periods of crisis. Numerous questions remain as to the best way to adapt the conduct of monetary policy to its new environment. This conference clarified these questions, even if it did not provide any definitive answers to them.

New challenges for public debt in advanced economies Summary of the conference held in Strasbourg on 16-17 September 2010

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On 16-17 September 2010, the Banque de France's Directorate General Economics and International Relations and the Bureau d'économie théorique et appliquée *(BETA) of Strasbourg University jointly hosted a conference on the new challenges posed by public debt in the industrialised countries. The conference brought together a diverse public made up of economists from French and foreign universities, ESCB and other central banks and European and international institutions. The relevance of the topic in the context of the crisis and fiscal imbalances that the advanced economies are currently experiencing is undeniable.*

The conference highlighted three topics relating to fiscal consolidation that have been hotly debated in international bodies: at what horizon, at what pace and by what magnitude should the current fiscal imbalances be corrected, so as to restore market confidence and stimulate economic activity over the medium term? These questions, which are the common focus of the concerns of political decision-makers and researchers alike formed the backbone of the conference.

The issue of the risks linked to excessive public debt is universally recognised as a cause for concern. However, the effect on economic activity of containing debt dynamics is not neutral and different approaches are possible to achieve this objective. The discussions that took place at the conference made it possible to gauge the consequences of these different policy choices; while it is pretty clear that excessive public debt can weigh on medium-term growth, several presentations showed that the links between public debt and economic activity are complex.

Some of the research that was presented at the conference related to the impact of the consolidation methods used on economic activity. In particular, the impact of public debt on the behaviour of financial and real estate markets, as well as the links between public debt and sovereign risk were discussed. Lastly, the role of the institutions responsible for debt governance was addressed. The initiatives taken to encourage countries,

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NB: The authors of this summary are (or were) members of the Banque de France's Public Finance Division. Any omissions or errors are their responsibility and neither the authors of the articles nor the Banque de France are liable for them.

following the example of Germany, to introduce fiscal rules at national level were touched on. In fact, the discussions showed that implementation of an urgent political and institutional response to the challenges constituted by the fiscal imbalances is vital.

All of these issues are at the heart of the concerns of central banks, which cannot ignore the fiscal sphere given its substantial impact on price levels and price stability.

Keywords: public debt, governance, financial markets, fiscal policy.

JEL codes: E62, E63, H6, H12.

On 16-17 September 2010, the Banque de France's Directorate General Economics and International Relations via its Public Finance Division and the *Bureau d'économie théorique et appliquée* (BETA) of Strasbourg University headed by Claude Diebolt jointly hosted a conference on the new challenges posed by public debt in the industrialised countries. The conference brought together a diverse public made up of economists from French and foreign universities, European System of Central Banks (ESCB) and other central banks, and European and international institutions. The relevance of the topic in the context of the crisis and fiscal imbalances that the advanced economies are currently experiencing is undeniable. The highly stimulating discussions and diversity of points of view expressed during the conference made it possible to identify the main macroeconomic challenges facing the advanced economies in relation to the soaring levels of public debt.[1]

The conference was opened by Jean-Alain Héraud, Dean of the Faculty of Economics and Management at Strasbourg University, who, along with Pierre Jaillet, Director General of Economics and International Relations at the Banque de France, expressed his satisfaction at the success of this first collaboration between the Bank and Strasbourg University. This joint enterprise is wholly in keeping with the Bank's desire to develop closer ties between research carried out in academia and that conducted within public institutions. Pierre Jaillet then set out the issues relating to public debt from a central bank's point of view. He highlighted three questions that have been hotly debated in international bodies, i.e. at what horizon, at what pace and by what magnitude should the current fiscal imbalances be corrected, so as to restore market confidence and stimulate economic activity over the medium term? These questions, which are the common focus of the concerns of both political decision-makers and researchers, were discussed throughout the conference, notably in the keynote speeches given by Michel Camdessus, former General Manager of the International Monetary Fund and Honorary Governor of the Banque de France, and Jean-Paul Pollin, Professor at Orleans University.

From left to right: Jean-Paul Pollin, Pierre Jaillet and Michel Camdessus.

1 *A large selection of the articles presented at the conference will be published in a special issue of the* Revue économique *at the end of 2011.*

Jean-Paul Pollin set out the main difficulties stemming from the ongoing crisis in rising to the challenge of simultaneously reducing government deficits and restoring dynamic economic growth. The main difficulty in resolving this dilemma is two-fold: on the one hand, it relates to the precise assessment of the impact of the crisis on potential growth and on the other, the measurement of the effect of fiscal policy on economic activity through, for example, the estimation of fiscal multipliers. These assessments determine the trade-off arrived at between an overly rapid exit from stimulus measures, which could depress growth, and exiting too late, which would be harmful for the sustainability of public finances. Jean-Paul Pollin also recalled that these discussions should not obscure the structural reforms that need to be implemented in order to correct over the medium term the macroeconomic imbalances that existed prior to the crisis. Lastly, he spoke about the creation of a new institutional framework to regulate public finances and coordinate economic policies, this issue being the subject of Michel Camdessus' address.

Michel Camdessus' address focused on presenting the objectives and conclusions of the working group on the constitutional rule on balancing France's public finances, which he chaired and which submitted its report to the French President on 21 June 2010. Michel Camdessus started by highlighting the shortcomings in the French institutional system, which in the past have made it possible, notwithstanding sometimes binding rules on government spending, to disregard the commitments made by decision-makers at European level. At a time when the crisis has increased the need for credibility on the part of national fiscal authorities, it seems that the best way of achieving this, as shown by Germany's example, is to enshrine a framework law in the Constitution providing for a return to balanced public finances. The latter's trajectory and the correction of intermediate errors must be enshrined in the annual budgets and the multi-year programmes that contain our European commitments regarding general government across the board. The aim of this system is to reinforce the credibility of these commitments by submitting them to Parliament for annual approval.

The issue of risks linked to excessive public debt is not a new one. Antoine Parent,[2] Professor at Nancy II University, provided a historical perspective based on a critical commentary of Reinhart and Rogoff's work *This Time is Different: Eight Centuries of Financial Folly*. He showed that the questions being addressed at the moment, and particularly at this conference, are little different from those that were being asked at the end of the nineteenth century. For example, following the crisis of the British bank Barings in 1890, Crédit Lyonnais developed its own

2 *The conference ended with a roundtable chaired by Olivier De Bandt (Banque de France) that brought together Daniele Franco (Banca d'Italia), Helmut Herres (Bundesfinanzministerium), Arnaud Marès (Morgan Stanley), Philippe Moutot (ECB) and Antoine Parent (BETA, Strasbourg University). The main elements of their contributions are included in the different sections of this summary.*

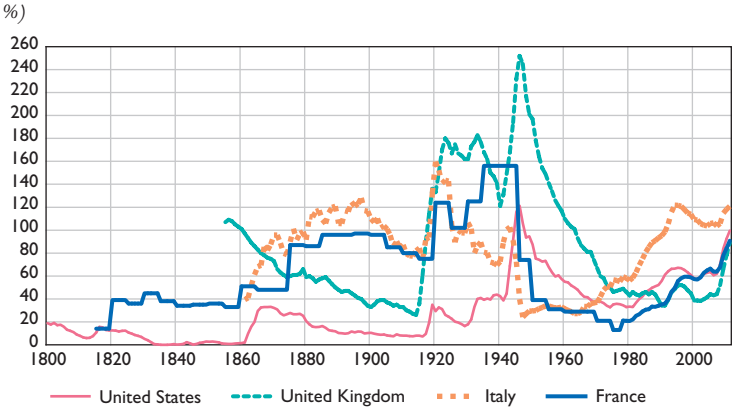
assessment of sovereign insolvency risk and conducted studies aimed at identifying warning thresholds above which countries' fiscal positions were deemed to be critical. However, the particular context prevailing in each era substantially affects the responses provided to the crisis at hand.

Thus, while the questions raised are not new, as was recalled by Olivier de Bandt, Director for Business Conditions and Macroeconomic Forecasting at the Banque de France, they have come to the fore again due to the levels of public debt currently observed in most developed countries. Indeed, the build-up of fiscal imbalances over the past 30 years has led to the highest public debt ratios ever seen in peacetime (see Chart 1). This trend has been exacerbated by the crisis due to the combined effect of automatic stabilisers, fiscal stimulus packages and the measures taken to support the banking sector.

However, Olivier de Bandt pointed out that, even more than the levels observed, it is the debt dynamics that are worrying. Indeed, in most advanced economies the accumulation of debt is self-perpetuating (the "snowball effect"). Recent simulations carried out by the European Commission show that, in the absence of corrective measures taken by governments, the euro area's debt and that of the EU-27 could rise to 140% of GDP by 2020, compared with around 80% of GDP currently. Only strict application of stability programmes and keeping public deficits at sustainable levels subsequently would make it possible to stabilise the euro area's debt ratio at its current level. It is crucial for governments to announce and embark on a process of credible fiscal consolidation and to stick to it over the long term.

Chart 1 Public debt-to-GDP ratio 1800-2009

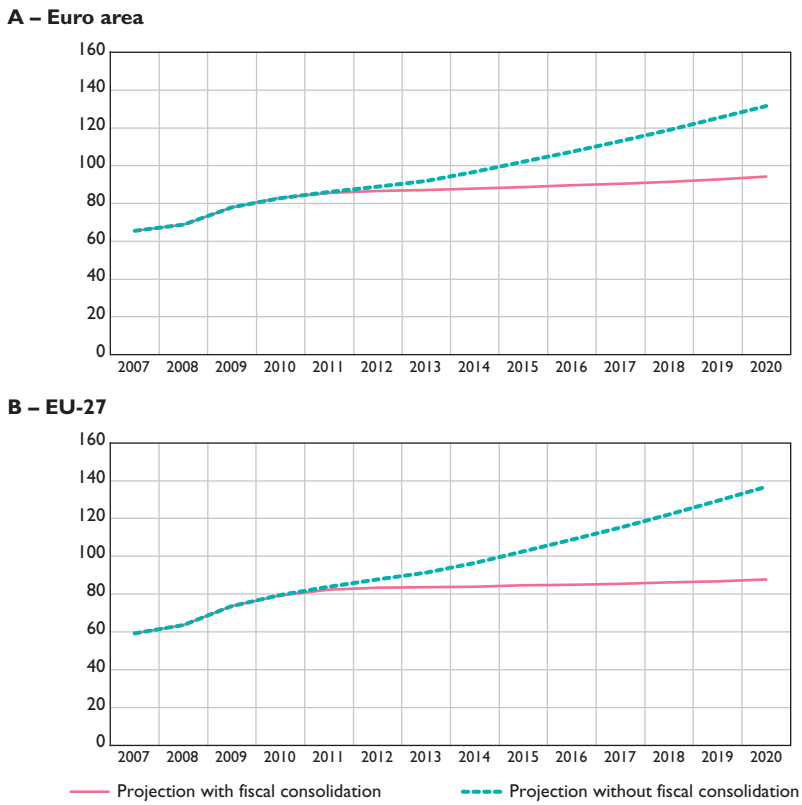
(as a %)



Source: Banque de France.

Chart 2 Medium-term projections of the public debt-to-GDP ratio in the European Union and euro area

(as a % of GDP)



Source: European Commission.

However, the effect on economic activity of containing debt dynamics is not neutral. Different means can be used to achieve this. The discussions at the conference made it possible to gauge the consequences that stem from these choices. Indeed, while it is pretty clear that excessive public debt can weigh on medium-term growth, much research has shown the complexity of the links between public debt and economic activity. Jacques Le Cacheux, Director of the research department at the Observatoire français des conjonctures économiques (OFCE) and Professor at the University of Pau and Pays de l'Adour, presented the latest developments in the structure of the multi-region general equilibrium model INGENU.[3] This type of complex model is designed to analyse numerous fundamental economic issues, including that of persistently high levels of public debt, but proves to be tricky to use on account of the extreme sensitivity of the results to the many parameters that it requires.

3 *Jacques Le Cacheux: "Long-term sustainability of public debts: a global perspective".*

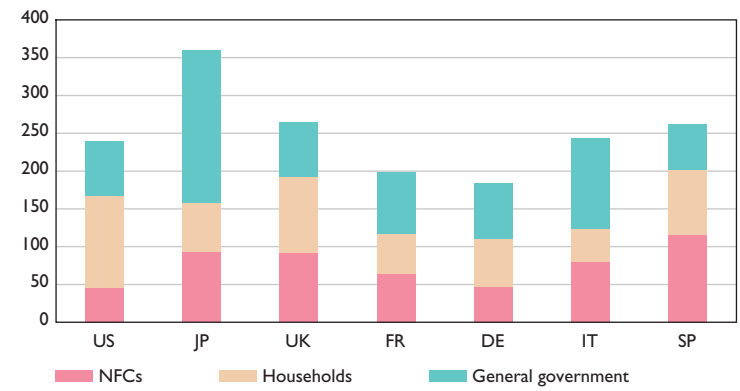
Once finalised, it should make it possible to address the issue of debt at the global level taking account of economic and financial interactions and the long-term demographic outlook.

1| Complex links between fiscal policy and economic activity

Most of the participants noted that their work on public debt was conducted within the wider perspective of overall imbalances. Indeed, public debt is only one component of total debt, which also reached record levels before the crisis. For some countries (Spain, the United States), this high level of indebtedness of domestic agents has its counterpart in growing external debt (twin deficits).

Chart 3 Debt ratios by type of economic agent in 2009

(as a %)



Source: Banque de France.

1 | 1 Is there a level of public debt that should not be exceeded?

Alexandru Minea, Professor at the University of the Auvergne, showed that the links between public debt and economic growth are not linear.[4] With the same level of public debt, several different levels of growth may be reached. The situation that actually comes about will ultimately depend on private sector expectations. As long as the debt is deemed sustainable, short-term Keynesian effects (an increase in consumption) will have a positive impact on growth. Conversely, in the event of a turnaround in private sector expectations, long-term non-Keynesian effects (an increase

4 *Alexandru Minea and Patrick Villieu: "Persistent deficits, growth and indeterminacy".*

in savings) predominate due to the expected rise in taxes and social security contributions to finance the debt. This research thus points to the existence of a debt threshold at which the turnaround occurs, although it does not seek to measure it.

Cristina Checherita, economist in the Fiscal Policies Division of the European Central Bank, addressed this issue from an empirical perspective.[5] Her work highlights the existence of a turning point beyond which debt has a negative impact on growth. In line with Reinhart and Rogoff's findings, Cristina Checherita estimated this turning point at around 90%-100% of GDP, levels that have already been reached or are expected to be reached by several countries, notably in the euro area. This result underscores the need for urgent fiscal consolidation in the countries concerned.

Francesco Caprioli, economist at the Banca d'Italia, showed however that, even if a government takes all the necessary measures to reduce its debt after a period in which it has risen sharply, bringing it down to pre-crisis levels should not be an objective in itself.[6] The sustainable level for public debt may be higher than pre-crisis levels. This finding stems from the nature of private sector expectations vis-à-vis public debt default risk. If expectations are not rational but rather adaptive (agents learn from experience) then sustainability levels for public debt will depend on the country's past debt record.

1|2 The economic impact of public debt is not neutral

Some of the research presented at the conference concerned the impact on economic activity of the means of consolidation used.

Several participants also underscored the fact that public debt developments may have different effects depending on the markets concerned. Luca Agnello, economist at the Banque de France, thus showed that although, overall, an unexpected deterioration in public finances has a negative impact on the prices of financial and real estate assets, the speed with which shocks are propagated and their persistence can differ greatly.[7] Financial markets react almost instantaneously to shocks and absorb them rapidly, whereas real estate markets react later and the effect of shocks is persistent.

Roland Winkler, economist at the Goethe Institute in Frankfurt, presented the conclusions of a study seeking to determine the best exit strategy for the euro area taking account of the effects of the influx of sovereign bonds

5 *Cristina Checherita and Philipp Rother: "The impact of high and growing government debt in economic growth: an empirical investigation of the Euro area".*
6 *Francesco Caprioli, Pietro Rizza and Pietro Tommasino: "Optimal fiscal policy when agents fear government default".*
7 *Lucas Agnello and Ricardo Sousa: "Fiscal policy and asset prices".*

on financial markets.[8] The conclusions are that consolidation should be rapid (shock therapy), based mainly on spending cuts and higher taxes on consumption. In the current situation, the author therefore recommends simultaneous fiscal consolidation in the euro area countries, which would be offset by a single monetary policy that could remain accommodating at the start of the process.

On the role of monetary policy in the context of a fiscal crisis, Antoine Parent presented an analysis based on the lessons of the past.[9] This study highlights the existence of a liquidity trap in 1928-29 in the United States. The authors wonder whether in that situation expansive monetary policy would have made it possible to avoid the Great Depression, and answer in the negative. They conclude that an appropriate way of managing the crisis would have been to exit the liquidity trap by raising interest rates so as to break expectations leading to the formation of bubbles on asset markets.

Coming back to the recent period, Philippe Moutot, Deputy Director-General of Economic Research and Director of Monetary Policy at the European Central Bank (ECB), analysed the coordination of economic policies in the last recession. In his view, Europe did not suffer from the absence of an integrated European economic government. On the contrary, the current European structure made possible the implementation of an appropriate policy mix: on the one hand, monetary policy was conducted by the independent central bank and, on the other, national governments, under the impetus of the European Commission, coordinated their national actions. Indeed, unlike the management of the 1929 crisis in the United States, the monetary policy conducted by the ECB during the recent crisis, notably the implementation of non-standard measures, made it possible to successfully tackle the liquidity crisis with the attendant dangers of a liquidity trap linked to zero-bound interest rates. However, the sovereign debt crisis experienced by some euro area countries has shown the need to reconsider the links between fiscal policy and other economic policies.

2| Public debt and financial markets

If public debt can have effects on economic activity, it can also have a significant impact on the behaviour of financial markets and vice versa. This second aspect was the subject of a special session during the conference.

8 *Ignazio Angeloni, Ester Faia and Roland Winkler: "Exit Strategies".*
9 *Claude Diebolt, Antoine Parent and Jamel Trabelsi: "Revisiting the 1929 Crisis: Was the Fed Pre-Keynesian? New Lessons from the Past".*

2|1 Financial markets have an impact on the cost of public debt and sovereign default risk

The self-perpetuating build-up of debt stems from an extremely large stock of initial debt but also from the differential between interest rates and the growth rate of the economy. The interest rate determines the cost of debt and includes a fundamental component, i.e. the risk premium that is set by financial markets. Andreas Schabert, economist at Dortmund University and Amsterdam University, presented the findings of a study aimed at investigating the impact of risk premia on public debt using the assumption that a government is obliged to repay its debt as early as possible.[10] The author shows that risk premia dynamics result from investors' expectations regarding the probability of a government defaulting. These expectations are based on an assessment of the sustainability of the debt and governments' credibility in committing themselves not to default. These expectations are largely founded on an assessment of the future interest rate burden and of the resources governments have to cope with it. The authors show that negative spirals can occur. For example, in order to guard against default risk, investors raise risk premia, which increases the interest rate burden and therefore reduces the debt's sustainability, thus precipitating a default.

Peter Wierts, economist at the Nederlandsche Bank, presented the findings of an empirical study of the interactions between the public debt management policies conducted by countries – in France this role is played by the Agence France Trésor (AFT) – and macroeconomic variables.[11] The authors estimated a reaction function describing public debt management behaviour in response to variables such as the yield curve, monetary policy, and the liquidity and size of money and debt markets. They show that the behaviour of debt managers affects financial stability in euro area countries. Public debt managers tend to focus on minimising the cost of debt by reacting strongly to changes in the slope of the yield curve. In so doing, they increasingly make use of hedging instruments such as interest rate swaps. However, these swaps do not provide protection against all types of risk: while they hedge against interest rate risk, they do not hedge against the risks linked to refinancing operations. They can therefore generate counterparty risk and may ultimately reduce the transparency of the overall risk profile.

10 Falko Juessen, Ludger Linnemann and Andreas Schabert: "Understanding default risk premia on public debt".
11 Lex Hoogduin, Bahar Öztürk and Peter Wierts: "Public Debt Managers' Behaviour: Interactions with Macro Policies".

2 | 2 Financial markets are involved in assessing sovereign risk

Pedro Gomes, economist at the London School of Economics, presented an empirical analysis of the links between public debt and sovereign ratings.[12] The authors sought to reconstitute the sovereign debt ratings attributed by the main rating agencies (Moody's, Fitchratings and Standard & Poor's) with the aid of the main economic variables such as per capita GDP, GDP growth, inflation, external debt and unemployment. The authors show that in the industrialised countries there are large disparities in the correlation between fiscal imbalances and agencies' sovereign risk ratings. Some countries appear to enjoy a higher rating than their economic indicators might suggest (e.g. the United States, Italy and France) while others appear to be "under-rated" compared with the state of their fundamentals (Greece, Ireland and Portugal).

Philippe Frouté, economist at the Banque de France, presented the findings of a study devoted to the impact of expectations regarding macroeconomic fundamentals on the dynamics of sovereign spreads.[13] The authors suggest that this impact is greater following the adoption of a regulatory framework that modifies the rules governing financial stability. They draw on the example of the implementation of the Basel II accords to explain the existence of a structural break in 2005 in the correlation between European countries' sovereign spreads and expectations regarding developments in fiscal and current account deficits and inflation. The authors also show that this effect can be obscured if another large shock occurs. Indeed, the financial shock caused by the crisis has overshadowed the information relating to Basel II and led to an underestimation of the effect of the institutional changes on the impact of expectations regarding macroeconomic fundamentals on spreads. However, the authors show that the crisis also augmented the explanatory power of expectations regarding economic fundamentals vis-à-vis sovereign spread dynamics.

Arnaud Marès, economist at Morgan Stanley, advanced the idea that the financial markets are indeed at the root of the crisis, not because the system failed, but through their response to the growing problems of sustainability that they perceived. The sharp widening of spreads on sovereign bonds can be interpreted both as a sanction directed at governments that are lax in their conduct of fiscal policy and as an incentive to countries in difficulty to implement corrective policies. In this sense, the accusation directed at financial markets that they exacerbated the difficulties of some countries is, in his opinion, misplaced. This point of view however sparked debate. Indeed, one of the justifications for the introduction of fiscal rules is that it makes medium-term fiscal action credible in the face

12 Antonio Afonso and Pedro Gomes: "Do fiscal imbalances deteriorate sovereign debt ratings?"
13 Olivier Damette, Gilles Dufrénot and Philippe Frouté: "Are the forecasted macroeconomic variables informative of the changes observed in the euro area sovereign spreads?".

of markets that can tend to overreact to the announcement of economic indicators. For the proponents of this latter view, therefore, it is necessary to design an effective institutional framework and to reinforce market discipline in order to enable fiscal policies to follow a sustainable path conducive to growth.

3| The role of debt governance institutions

3|1 Fiscal rules

Daniele Franco, Director of the Department of Structural Economic Analysis at the Banca d'Italia, presented an overview of fiscal rules in Europe. He recalled the economic principles that guided the design of fiscal rules for EMU: correction of externalities linked to deficits and public debt, "no bail-out", and countering moral hazard and free-riding. It is easier to comply with these different objectives when they are part of a supranational framework. Daniele Franco judges that, while the crisis has underscored the need to reform the fiscal surveillance framework, a radical overhaul of the rules is not called for. He rather recommends incremental reform that would address the shortcomings revealed by the crisis. For example, better account should be taken of the complex links between macroeconomic variables and fiscal policies. The standard indicators have shown their limitations. In this respect, the case of Spain is very illustrative. Although the country has been hard hit by the crisis, just a few months before its onset some analysts were praising its development model. At the time, few observers paid attention to the chronic external deficits or to private agents' high rate of indebtedness. This being the case, an increasingly large proportion of the Spanish economy saw its vulnerability to interest rates and dependence on the buoyancy of one particular sector of activity grow. Like the European Commission and the ECB, Daniele Franco recommends the following changes to the Stability and Growth Pact (SGP): enhancing surveillance, strengthening sanctions and increasing the role of the debt criterion in the assessment of national fiscal policies. The ECB goes even further in recommending the creation of an independent fiscal policy watchdog. Both of these institutions also encourage national governments to implement fiscal rules at national level.

In this context, the introduction of a constitutional fiscal rule in Germany was cited as an example. This rule was presented by Helmut Herres, Director of Fiscal Policy in the German Federal Ministry of Finance. It consists of the introduction of a deficit limit set in cyclically-adjusted

terms (0.35% for the Bund by 2016 and 0% for the Länder by 2020) and a control account aimed at limiting slippage with respect to the target. The aim of the rule is to make fiscal policy symmetrical throughout the business cycle. It thus makes it possible to steer medium-term fiscal policy in a way that is consistent with the objectives of the SGP.

3|2 Towards a European debt agency?

Pavel Diev, economist at the Banque de France, set out the idea of the creation of a European debt agency.[14] This body would provide several benefits: a reduction in the cost of raising funds through the creation of a more liquid government bond market, a fall in the default risk perceived by markets, greater ease of refinancing and the fiscal discipline role played by financial markets. But the creation of such an agency raises numerous issues: how can the risks of free-riding within the euro area be guarded against? And what about the supervision and harmonisation of national regulations?

The conference showed, on the one hand, the growing interest of economic research in the issue of excessive public debt and, on the other hand, the convergence of the participants' concerns, whether they be researchers, market practitioners, macroeconomists or financial experts. The discussions showed that all of them advocate implementation of an urgent political and institutional response to the challenges posed by fiscal imbalances. While there was near unanimous agreement on the main thrust of these responses, divergent but also complementary points of view were expressed as to the exact means to be used. These issues are at the heart of the concerns of central banks, which cannot ignore the fiscal sphere given its significant impact on price levels and price stability.

14 Laurent Daniel, Pavel Diev: "What Prospects for a European Debt Agency?"

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- **CECEI 2009 Annual Report**
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- **Commission bancaire 2009 Annual Report**
  Published by *Secrétariat général de la Commission bancaire.*
- **International symposium (2008): Globalisation, inflation and monetary policy**
- **Means of payment and transfer systems oversight Report 2009**
  Published by *direction des Systèmes de paiement et des infrastructures de marché.*

Statistics

Contents

Economic developments

Money, investment and financing

Financial markets and interest rates

Other statistics

Nota bene

Changes have been made to Table 3: since 1 January 2011, the euro area has had 17 members.

Table 8: under "Current account", a footnote has been added to "Expenditure" under the heading Income.

The data in this section are updated on a monthly basis on the Banque de France's website.

Table 1
Industrial activity indicators – Monthly Business Survey – France

(NAF revision 2; seasonally-adjusted data)

	2010						2011
	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Changes in production from the previous month (a)							
Total manufacturing	**7**	**3**	**10**	**5**	**15**	**3**	**24**
Food products and beverages	16	7	10	14	13	-3	18
Electrical, electronic and computer equipement and other machinery	8	8	11	10	14	10	24
Automotive industry	8	-2	10	14	13	0	40
Other transport equipment	1	13	6	14	7	13	6
Other manufacturing	6	2	9	-4	19	2	19
Production forecasts (a)							
Total manufacturing	**5**	**9**	**4**	**11**	**10**	**11**	**8**
Food products and beverages	8	7	9	9	15	8	9
Electrical, electronic and computer equipement and other machinery	13	4	5	9	11	13	11
Automotive industry	6	9	8	14	9	13	8
Other transport equipment	32	15	10	25	22	15	22
Other manufacturing	5	10	5	14	7	10	7
Changes in orders from the previous month (a)							
Total manufacturing	**9**	**10**	**11**	**11**	**18**	**12**	**21**
Foreign	7	11	9	13	17	15	19
Order books (a)							
Total manufacturing	**4**	**7**	**11**	**12**	**16**	**19**	**24**
Food products and beverages	3	6	7	10	8	7	8
Electrical, electronic and computer equipement and other machinery	6	11	14	10	16	21	23
Automotive industry	-21	-8	12	3	19	12	20
Other transport equipment	43	45	46	53	52	59	63
Other manufacturing	5	4	8	10	14	18	25
Inventories of finished goods (a)							
Total manufacturing	**0**	**0**	**-1**	**-1**	**0**	**0**	**1**
Food products and beverages	0	2	0	3	1	3	6
Electrical, electronic and computer equipement and other machinery	3	1	1	2	3	3	6
Automotive industry	4	11	-8	1	0	-20	-1
Other transport equipment	1	2	1	-9	-1	-2	-2
Other manufacturing	2	-4	-2	-5	-2	1	-1
Capacity utilisation rate (b)							
Total manufacturing	**76.5**	**74.5**	**77.1**	**77.0**	**78.4**	**78.4**	**79.8**
Staff levels (total manufacturing) (a)							
Changes from the previous month	-1	0	0	2	3	3	6
Forecast for the coming month	-2	-1	-3	0	2	2	3
Business sentiment indicator (c)							
	102	**102**	**103**	**104**	**107**	**107**	**110**

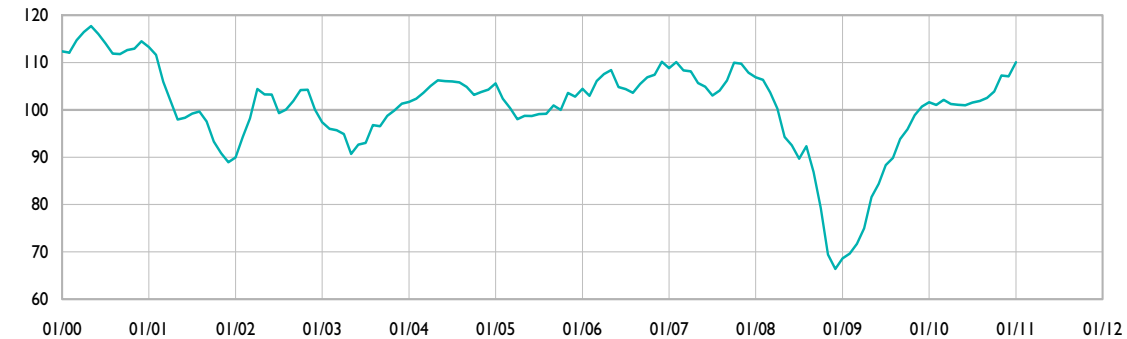
(a) Data given as a balance of opinions. Forecast series are adjusted for bias when it is statistically significant.
(b) Data given as a percentage.
(c) The indicator summarises industrial managers' sentiment regarding business conditions. The higher the indicator is, the more positive the assessment. The indicator is calculated using a principal component analysis of survey data smoothed over three months. By construction, the average is 100.

Source: Banque de France. *Produced 23 February 2011*

Table 2
Industrial activity indicators – Monthly Business Survey – France (NAF revision 2; seasonally-adjusted data)

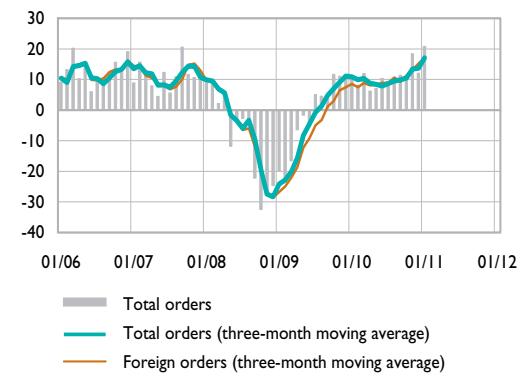
Business sentiment indicator

(100 = 1981 – last value)



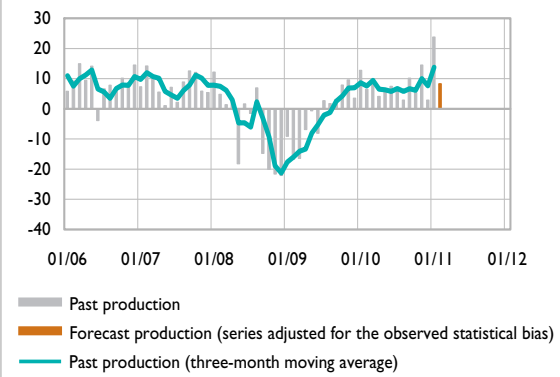
Orders (a)

(balance of opinions; monthly change)



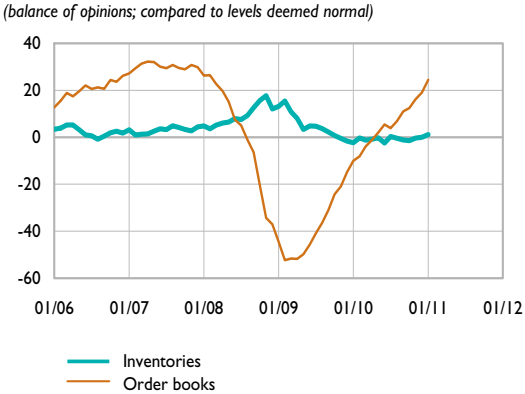
Production (a)

(balance of opinions; monthly change)



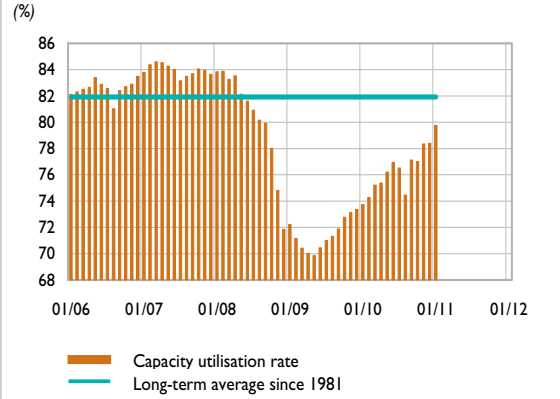
Inventories and order books (a)

(balance of opinions; compared to levels deemed normal)



Capacity utilisation rate (a)

(%)



(a) Manufacturing.
Source: Banque de France.

Produced 23 February 2011

Table 3
Consumer price index

(annual % change)

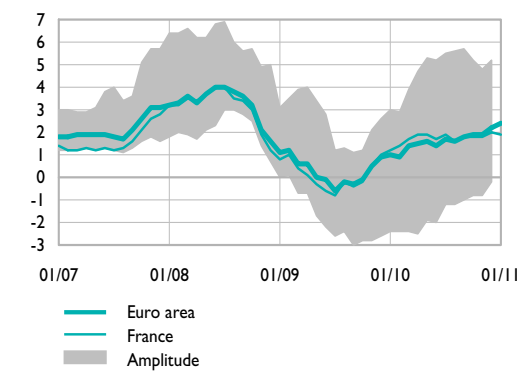
	2010								2011
	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
France	1.9	1.7	1.9	1.6	1.8	1.8	1.8	2.0	1.9
Germany	1.2	0.8	1.2	1.0	1.3	1.3	1.6	1.9	2.0
Italy	1.6	1.5	1.8	1.8	1.6	2.0	1.9	2.1	1.9
Euro area	1.6	1.4	1.7	1.6	1.8	1.9	1.9	2.2	2.4
United Kingdom	3.4	3.2	3.1	3.1	3.1	3.2	3.3	3.7	4.0
European Union	2.0	1.9	2.1	2.0	2.2	2.3	2.3	2.6	na
United States	2.0	1.1	1.2	1.1	1.1	1.2	1.1	1.5	1.6
Japan	-0.9	-0.7	-0.9	-0.9	-0.6	0.2	0.1	0.0	na

(annual average) *(seasonally-adjusted monthly % change)*

	2008	2009	2010	2010					2011
				Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
France	3.2	0.1	1.7	0.1	0.2	0.2	0.2	0.4	0.1
Germany	2.8	0.2	1.2	0.1	0.2	0.2	0.4	0.5	0.2
Italy	3.5	0.8	1.6	0.3	0.1	0.4	0.2	0.4	0.0
Euro area	3.3	0.3	1.6	0.1	0.1	0.2	0.2	0.3	na
United Kingdom	3.6	2.2	3.3	0.3	0.3	0.3	0.4	0.6	0.9
European Union	3.7	1.0	2.1	na	na	na	na	na	na
United States	3.8	-0.4	1.6	0.2	0.2	0.2	0.1	0.4	0.4
Japan	1.4	-1.4	-0.7	-0.2	0.2	0.4	0.2	-0.1	na

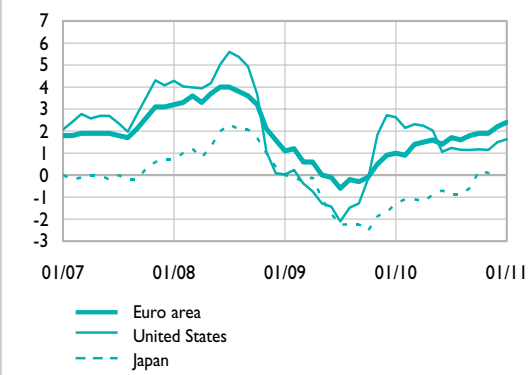
France and the euro area

(annual % change)



International comparisons

(annual % change)



Harmonised indices except for the United States and Japan.
Amplitude = extreme values of the indices of harmonised prices observed in the euro area (changing composition).

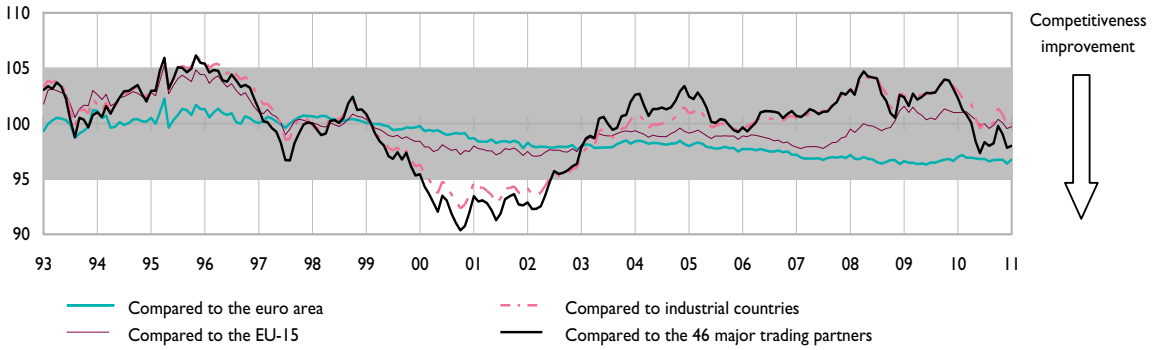
Sources: National data, Eurostat.

Produced 23 February 2011

Table 4
The competitiveness of France's economy

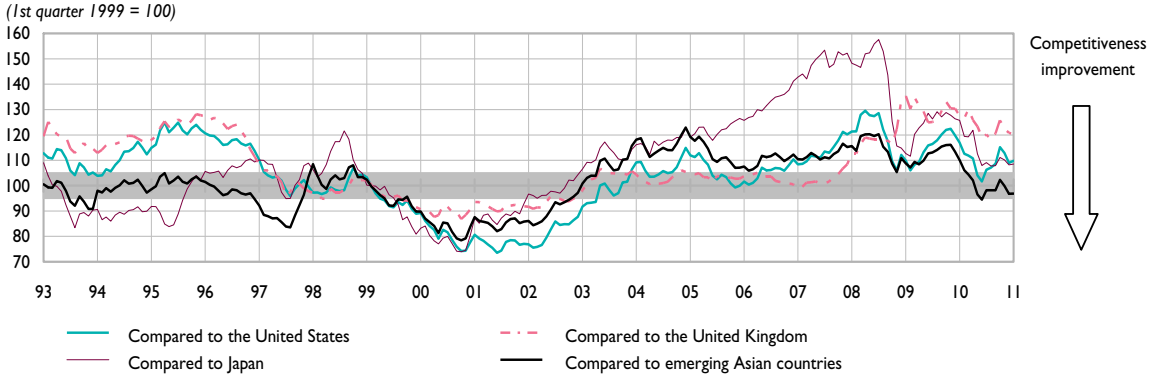
Indicators deflated by consumer prices

(1st quarter 1999 = 100)



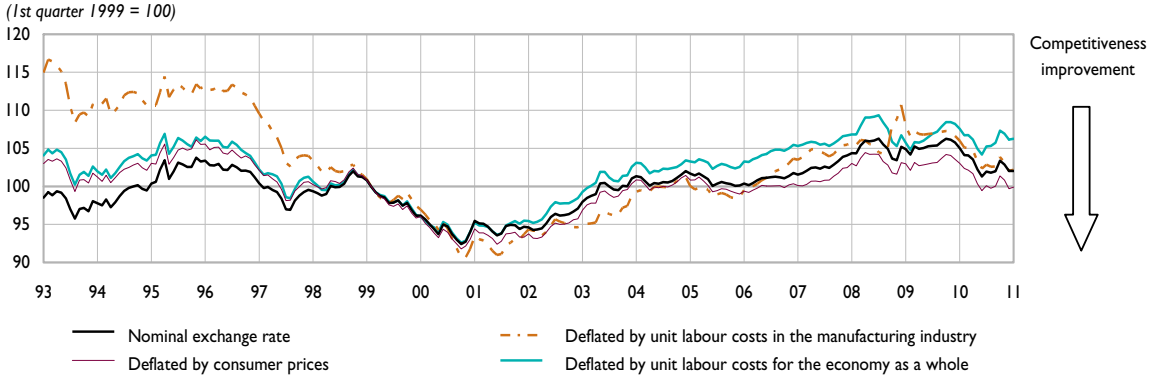
Indicators deflated by consumer prices

(1st quarter 1999 = 100)



Indicators of competitiveness compared to 24 OECD countries

(1st quarter 1999 = 100)



Grey area: change in competitiveness compared to long-term average less than 5%.
Sources: National data, Banque de France, ECB, IMF, OECD, Thomson Financial Datastream.

Calculations: Banque de France. *Produced 23 February 2011*

Table 5
Balance of payments – Main components (quarterly data) – France

(unadjusted data, EUR billions)

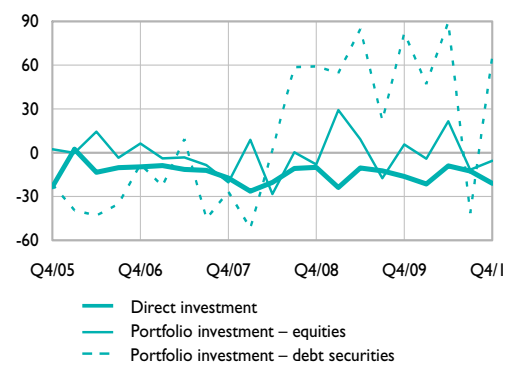
	2009	2010	2009	2010			
			Q4	Q1	Q2	Q3	Q4
Current account	**-36.8**	**-40.0**	**-14.6**	**-4.1**	**-11.6**	**-8.1**	**-16.2**
Goods	-44.6	-54.8	-12.8	-12.8	-13.4	-13.5	-15.1
Services	11.5	11.6	0.3	1.0	4.6	6.4	-0.4
Income	23.1	29.3	6.7	11.8	3.3	7.7	6.5
Current transfers	-26.9	-26.1	-8.8	-4.1	-6.1	-8.7	-7.2
Capital account	**0.3**	**0.0**	**0.0**	**0.2**	**0.0**	**-0.3**	**0.2**
Financial account	**59.4**	**20.4**	**29.3**	**2.7**	**5.9**	**1.8**	**9.9**
Direct investment	-63.0	-63.9	-16.3	-21.4	-9.0	-12.5	-21.0
French direct investment abroad	*-105.9*	*-92.8*	*-27.6*	*-31.0*	*-18.4*	*-25.6*	*-17.8*
Foreign direct investment in France	*42.9*	*28.8*	*11.3*	*9.6*	*9.4*	*13.1*	*-3.2*
Portfolio investment	270.0	160.9	87.6	42.8	110.9	-53.0	60.2
Assets	*-60.6*	*36.0*	*17.4*	*-26.6*	*52.3*	*-29.4*	*39.7*
Liabilities	*330.7*	*124.9*	*70.2*	*69.4*	*58.6*	*-23.6*	*20.5*
Financial derivatives	-2.1	23.5	2.5	9.1	11.7	10.5	-7.8
Other investment	-149.4	-94.3	-43.7	-26.1	-109.4	60.3	-19.2
Reserve assets	3.9	-5.8	-0.7	-1.7	1.7	-3.5	-2.2
Net errors and omissions	**-22.9**	**19.5**	**-14.8**	**1.2**	**5.6**	**6.6**	**6.1**

Current account balance

(unadjusted data, EUR billions)

Financial account balance

(unadjusted data, EUR billions)



Source: Banque de France.

Produced 23 February 2011

Table 6
Balance of payments – Current and capital accounts (quarterly data) – France

(unadjusted data, EUR billions)

	2009	2010	2009	2010			
			Q4	Q1	Q2	Q3	Q4
Current account	**-36.8**	**-40.0**	**-14.6**	**-4.1**	**-11.6**	**-8.1**	**-16.2**
Goods	**-44.6**	**-54.8**	**-12.8**	**-12.8**	**-13.4**	**-13.5**	**-15.1**
Exports	*340.0*	*391.0*	*89.0*	*93.2*	*99.3*	*95.6*	*102.9*
Imports	*384.6*	*445.8*	*101.8*	*106.0*	*112.7*	*109.1*	*118.0*
General merchandise	-43.6	-53.6	-12.8	-12.2	-13.1	-13.5	-14.9
Goods procured in ports by carriers	-1.4	-1.8	-0.3	-0.4	-0.5	-0.5	-0.4
Goods for processing and repairs on goods	0.4	0.7	0.3	-0.2	0.2	0.5	0.1
Services	**11.5**	**11.6**	**0.3**	**1.0**	**4.6**	**6.4**	**-0.4**
Exports	*102.9*	*107.4*	*23.1*	*22.2*	*29.0*	*32.8*	*23.3*
Imports	*91.4*	*95.8*	*22.8*	*21.2*	*24.5*	*26.4*	*23.7*
Transportation	-0.7	-0.1	-0.1	-0.2	0.1	0.3	-0.3
Travel	7.8	6.4	-0.8	0.0	2.3	4.9	-0.8
Communications services	0.6	0.4	0.1	0.1	0.2	0.1	0.0
Construction services	2.7	2.4	0.7	0.6	0.8	0.4	0.6
Insurance services	-0.8	-0.4	-0.3	0.1	0.0	-0.4	-0.1
Financial services	0.5	0.3	0.2	0.1	0.0	0.1	0.0
Computer and information services	-0.3	-0.3	-0.1	-0.1	0.0	-0.1	-0.1
Royalties and license fees	3.0	3.5	0.6	0.8	0.7	0.9	1.0
Other business services	-0.1	0.4	0.4	-0.3	0.7	0.3	-0.4
Personal, cultural and recreational services	-1.2	-1.2	-0.3	-0.3	-0.3	-0.3	-0.3
Government services	0.0	0.2	0.0	0.1	0.0	0.1	0.0
Income	**23.1**	**29.3**	**6.7**	**11.8**	**3.3**	**7.7**	**6.5**
Compensation of employees	9.5	9.7	2.4	2.4	2.4	2.4	2.4
Investment income	13.7	19.7	4.3	9.4	0.9	5.3	4.1
Direct investment	*17.7*	*27.5*	*4.5*	*8.4*	*7.7*	*5.4*	*6.0*
Portfolio investment	*-0.1*	*-5.2*	*0.2*	*1.7*	*-6.0*	*0.3*	*-1.1*
Other investment	*-4.0*	*-2.6*	*-0.5*	*-0.7*	*-0.7*	*-0.4*	*-0.8*
Current transfers	**-26.9**	**-26.1**	**-8.8**	**-4.1**	**-6.1**	**-8.7**	**-7.2**
General government	-17.3	-17.4	-6.4	-1.7	-4.5	-6.3	-5.0
Other sectors	-9.6	-8.7	-2.3	-2.4	-1.6	-2.4	-2.2
of which workers' remittances	*-2.1*	*-2.1*	*-0.5*	*-0.5*	*-0.5*	*-0.6*	*-0.5*
Capital account	**0.3**	**0.0**	**0.0**	**0.2**	**0.0**	**-0.3**	**0.2**

Source: Banque de France.

Produced 23 February 2011

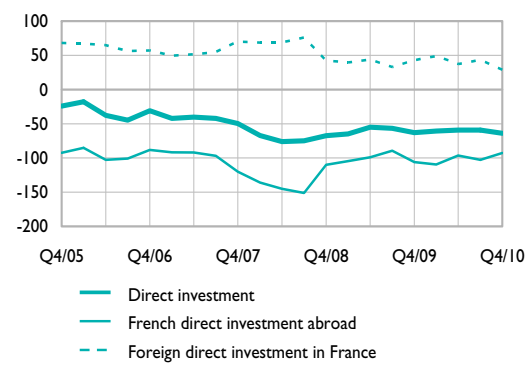
Table 7
Balance of payments – Financial flows (quarterly data) – France

(unadjusted data, EUR billions)

	2009	2010	2009	2010			
			Q4	Q1	Q2	Q3	Q4
Financial account	**59.4**	**20.4**	**29.3**	**2.7**	**5.9**	**1.8**	**9.9**
Direct investment	-63.0	-63.9	-16.3	-21.4	-9.0	-12.5	-21.0
French direct investment abroad	-105.9	-92.8	-27.6	-31.0	-18.4	-25.6	-17.8
of which equity capital and reinvested earnings	*-40.2*	*-39.1*	*-14.5*	*-14.6*	*-10.3*	*-11.9*	*-2.4*
Foreign direct investment in France	42.9	28.8	11.3	9.6	9.4	13.1	-3.2
of which equity capital and reinvested earnings	*14.1*	*18.9*	*1.8*	*4.3*	*6.9*	*4.0*	*3.6*
Portfolio investment	270.0	160.9	87.6	42.8	110.9	-53.0	60.2
Assets	-60.6	36.0	17.4	-26.6	52.3	-29.4	39.7
Equity securities	*-21.5*	*3.0*	*-11.8*	*0.0*	*15.8*	*-4.2*	*-8.7*
Bonds and notes	*-16.7*	*-39.3*	*-7.3*	*-42.8*	*19.3*	*-31.0*	*15.2*
Money market instruments	*-22.4*	*72.3*	*36.5*	*16.2*	*17.2*	*5.8*	*33.2*
Liabilities	330.7	124.9	70.2	69.4	58.6	-23.6	20.5
Equity securities	*48.1*	*-2.8*	*17.4*	*-4.1*	*5.7*	*-7.5*	*3.1*
Bonds and notes	*202.9*	*126.7*	*36.2*	*69.2*	*42.1*	*-15.0*	*30.3*
Money market instruments	*79.7*	*1.0*	*16.6*	*4.3*	*10.8*	*-1.1*	*-13.0*
Financial derivatives	-2.1	23.5	2.5	9.1	11.7	10.5	-7.8
Other investment	-149.4	-94.3	-43.7	-26.1	-109.4	60.3	-19.2
of which MFIs excl. Banque de France (net flows)	*-75.8*	*-46.1*	*-30.6*	*-16.8*	*-33.0*	*19.2*	*-15.5*
Reserve assets	3.9	-5.8	-0.7	-1.7	1.7	-3.5	-2.2
Net errors and omissions	**-22.9**	**19.5**	**-14.8**	**1.2**	**5.6**	**6.6**	**6.1**

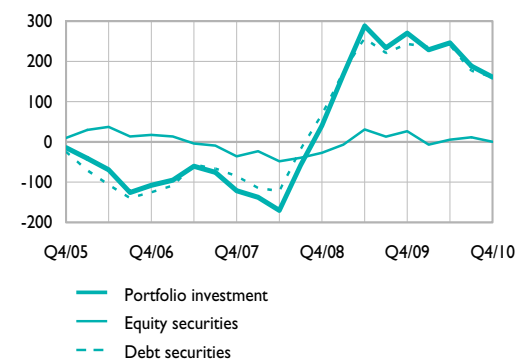
Direct investment account

(cumulated flows over 4 quarters)



Portfolio investment account

(cumulated flows over 4 quarters)



Source: Banque de France.

Produced 23 February 2011

Table 8
Balance of payments – Geographical breakdown (quarterly data) – France

(unadjusted data, EUR billions)

	3rd quarter 2010					
	EMU (a)	EU-27 excl. EMU (b)	USA	Japan	Switzerland	China
Current account	**4.0**	**-0.9**	**-0.4**	**-1.3**	**0.4**	**na**
Receipts	*78.4*	*22.6*	*10.1*	*2.2*	*6.0*	*4.0*
Expenditure	*74.4*	*23.5*	*10.6*	*3.5*	*5.6*	*na*
Goods	-5.3	0.8	-1.2	-0.4	0.1	-7.1
Receipts	*45.1*	*12.0*	*5.2*	*1.6*	*2.8*	*2.7*
Expenditure	*50.3*	*11.3*	*6.4*	*2.0*	*2.6*	*9.8*
Services	2.6	1.5	0.0	-0.1	0.0	0.3
Receipts	*13.1*	*5.1*	*2.3*	*0.3*	*1.2*	*1.1*
Expenditure	*10.5*	*3.5*	*2.3*	*0.4*	*1.2*	*0.8*
Income	8.1	1.2	0.9	-0.7	0.9	na
Receipts	*19.7*	*4.4*	*2.5*	*0.4*	*1.9*	*0.1*
Expenditure (c)	*11.6*	*3.2*	*1.6*	*1.1*	*1.0*	*na*
Current Transfers	-1.5	-4.4	-0.1	0.0	-0.6	0.0
Financial account	**na**	**na**	**na**	**na**	**na**	**na**
Direct investment	-10.0	-3.7	1.3	0.8	0.7	-0.3
French direct investment abroad	*-15.6*	*-5.8*	*-0.5*	*0.7*	*-0.1*	*-0.3*
Foreign direct investment in France	*5.6*	*2.1*	*1.8*	*0.0*	*0.8*	*0.0*
Portfolio investment (d)	na	na	na	na	na	na
Assets	-30.5	2.4	9.3	-12.4	-0.4	-1.0
Equity securities	*-5.4*	*-3.9*	*1.8*	*-0.3*	*0.6*	*-1.1*
Bonds and notes	*-25.6*	*-6.4*	*4.5*	*-1.8*	*-1.3*	*0.1*
Money market instruments	*0.4*	*12.6*	*3.0*	*-10.3*	*0.3*	*0.0*
Other investment	62.0	-17.9	25.9	2.3	4.5	-1.9
of which MFIs excluding Banque de France (net flows)	*17.5*	*-16.5*	*29.2*	*4.3*	*4.3*	*-2.0*

(a) 16 Member States (including Slovakia as of 1 January 2009).
(b) Denmark, United Kingdom, Sweden, European Institutions and New Member States (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Bulgaria, Romania).
(c) Geographical breakdown of portfolio investment income based on data compiled by the IMF (Coordinated Portfolio Investment Survey); data not available for China.
(d) The geographical breakdown is not available for liabilities.

Source: Banque de France. *Produced 23 February 2011*

Table 9
Balance of payments (monthly data) – France

(unadjusted data, EUR billions)

	2009	2010			12-month total	
					2009	2010
	Dec.	Oct.	Nov.	Dec.	Dec.	Dec.
Current account	**-2.0**	**-4.5**	**-8.0**	**-3.7**	**-36.8**	**-40.0**
Goods	-4.1	-3.2	-6.0	-5.9	-44.6	-54.8
Services	0.7	-0.4	-0.3	0.3	11.5	11.6
Income	3.3	2.1	0.6	3.8	23.1	29.3
Current transfers	-2.0	-3.0	-2.2	-2.0	-26.9	-26.1
Capital account	**-0.1**	**0.0**	**0.1**	**0.1**	**0.3**	**0.0**
Financial account	**-29.7**	**20.4**	**26.9**	**-37.4**	**59.4**	**20.4**
Direct investment	-8.0	-2.9	-5.3	-12.9	-63.0	-63.9
French direct investment abroad	*-13.0*	*-3.3*	*-2.7*	*-11.7*	*-105.9*	*-92.8*
Equity capital	*-6.7*	*5.4*	*-1.5*	*-1.0*	*-38.2*	*-18.3*
Reinvested earnings	*-0.2*	*-1.7*	*-1.7*	*-1.7*	*-2.1*	*-20.9*
Other capital	*-6.1*	*-7.0*	*0.5*	*-9.0*	*-65.7*	*-53.7*
Foreign direct investment in France	*5.0*	*0.5*	*-2.6*	*-1.1*	*42.9*	*28.8*
Equity capital	*2.8*	*-0.4*	*0.1*	*1.6*	*12.0*	*9.2*
Reinvested earnings	*0.2*	*0.8*	*0.8*	*0.8*	*2.1*	*9.7*
Other capital	*2.0*	*0.1*	*-3.5*	*-3.5*	*28.8*	*9.9*
Portfolio investment	51.1	-6.1	34.4	32.0	270.0	160.9
Assets	*40.7*	*-22.0*	*17.3*	*44.4*	*-60.6*	*36.0*
Equity securities	*-2.5*	*-1.4*	*-6.4*	*-0.9*	*-21.5*	*3.0*
Bonds and notes	*14.9*	*-21.2*	*15.7*	*20.6*	*-16.7*	*-39.3*
Money market instruments	*28.2*	*0.6*	*7.9*	*24.6*	*-22.4*	*72.3*
Liabilities	*10.5*	*15.8*	*17.1*	*-12.4*	*330.7*	*124.9*
Equity securities	*4.7*	*2.3*	*0.7*	*0.2*	*48.1*	*-2.8*
Bonds and notes	*14.0*	*11.3*	*17.3*	*1.7*	*202.9*	*126.7*
Money market instruments	*-8.3*	*2.2*	*-0.9*	*-14.2*	*79.7*	*1.0*
Financial derivatives	0.8	-4.3	0.9	-4.4	-2.1	23.5
Other investment	-73.4	32.8	-1.6	-50.4	-149.4	-94.3
of which MFIs excl. Banque de France (net flows)	*-57.5*	*33.1*	*9.9*	*-58.5*	*-75.8*	*-46.1*
Reserve assets	-0.3	0.9	-1.4	-1.7	3.9	-5.8
Net errors and omissions	**31.9**	**-15.9**	**-19.0**	**41.1**	**-22.9**	**19.5**

Source: Banque de France.

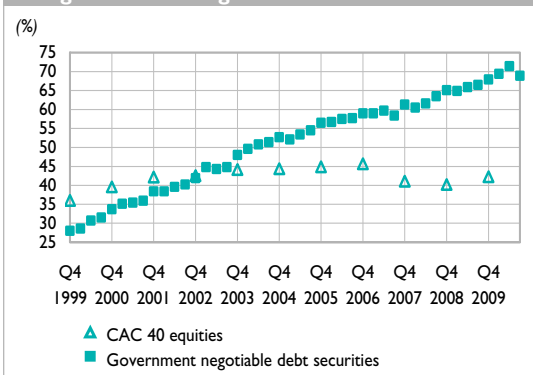
Produced 23 February 2011

Table 10
France's international investment position (direct investment measured at book value)

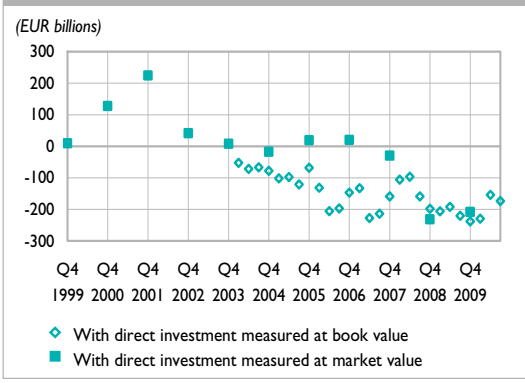
(EUR billions)

	2005	2006	2007	2008	2009	2010
	Dec.	Dec.	Dec.	Dec.	Dec.	Q3
Assets	**3,573.4**	**4,041.2**	**4,549.2**	**4,413.9**	**4,643.6**	**5,037.2**
French direct investment abroad	736.1	793.1	889.8	997.6	1,106.1	1,211.9
Equity capital and reinvested earnings	*491.3*	*548.8*	*613.9*	*674.4*	*717.6*	*779.3*
Other capital	*244.8*	*244.3*	*276.0*	*323.2*	*388.5*	*432.6*
Portfolio investment	1,587.9	1,851.0	2,014.1	1,834.7	1,998.2	2,108.6
(foreign securities held by residents)						
MFIs (resident security-holding sector)	*665.9*	*755.0*	*743.2*	*725.6*	*724.1*	*680.1*
Non-MFIs (resident security-holding sector)	*922.0*	*1,095.9*	*1,270.9*	*1,109.1*	*1,274.0*	*1,428.5*
Financial derivatives	124.5	159.2	241.0	234.0	237.9	262.0
Other investment	1,061.8	1,163.3	1,325.7	1,273.6	1,209.0	1,341.4
MFIs	*840.7*	*945.6*	*1,094.7*	*1,058.6*	*990.3*	*1,105.5*
Non-MFIs	*221.1*	*217.7*	*231.0*	*215.0*	*218.7*	*235.8*
Reserve assets	63.0	74.6	78.6	74.0	92.4	113.2
Liabilities	**-3,641.3**	**-4,188.3**	**-4,708.2**	**-4,612.0**	**-4,881.5**	**-5,210.9**
Foreign direct investment in France	-532.3	-578.7	-649.1	-685.8	-728.4	-765.1
Equity capital and reinvested earnings	*-325.0*	*-348.7*	*-386.2*	*-394.4*	*-408.5*	*-423.7*
Other capital	*-207.3*	*-230.0*	*-262.9*	*-291.4*	*-319.9*	*-341.4*
Portfolio investment	-1,764.8	-1,963.0	-1,987.9	-1,855.0	-2,296.9	-2,471.0
(French securities held by non-residents)						
MFIs (resident security-issuing sector)	*-414.5*	*-484.4*	*-505.4*	*-491.3*	*-552.7*	*-601.5*
Non-MFIs (resident security-issuing sector)	*-1,350.3*	*-1,478.6*	*-1,482.5*	*-1,363.6*	*-1,744.2*	*-1,869.6*
Financial derivatives	-147.4	-188.9	-312.6	-289.3	-291.1	-346.5
Other investment	-1,196.8	-1,457.7	-1,758.7	-1,782.0	-1,565.2	-1,628.3
MFIs	*-1,016.1*	*-1,245.0*	*-1,465.6*	*-1,345.2*	*-1,197.3*	*-1,295.0*
Non-MFIs	*-180.6*	*-212.7*	*-293.1*	*-436.8*	*-367.9*	*-333.3*
Net position	**-67.9**	**-147.1**	**-159.0**	**-198.1**	**-237.9**	**-173.8**

Non-resident holdings of CAC 40 equities and government negotiable debt securities



France's international investment position



Source: Banque de France.

Produced 23 February 2011

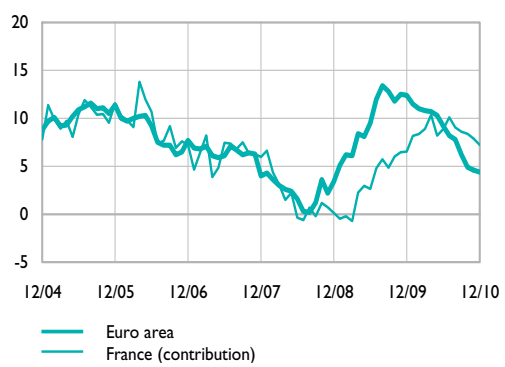
Table 11
Main monetary and financial aggregates – France and the euro area

(annual percentage growth rate)

	2008	2009	2010	2009	2010						
	Dec.	Dec.	Dec.	Dec.	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
M1											
Euro area (a)	3.4	12.4	4.4	12.4	9.2	8.2	7.8	6.2	4.9	4.6	4.4
France (contribution)	0.2	6.5	7.2	6.5	8.9	10.1	9.1	8.6	8.4	7.9	7.2
M2											
Euro area (a)	8.3	1.6	2.2	1.6	1.4	1.5	2.1	2.0	2.1	2.3	2.2
France (contribution)	8.1	0.0	7.4	0.0	5.2	6.2	6.2	6.4	7.2	7.4	7.4
M3											
Euro area (a)	7.6	-0.3	1.7	-0.3	0.2	0.3	1.2	1.1	1.1	2.1	1.7
France (contribution)	5.3	-4.2	6.6	-4.2	-0.7	0.9	2.5	4.9	6.4	6.7	6.6
Loans to the private sector											
Euro area (a)	5.7	-0.2	1.9	-0.2	0.4	0.8	1.3	1.3	1.5	2.0	1.9
France (b)	7.0	-0.6	5.0	-0.6	1.9	3.1	3.7	3.8	4.3	5.1	5.0

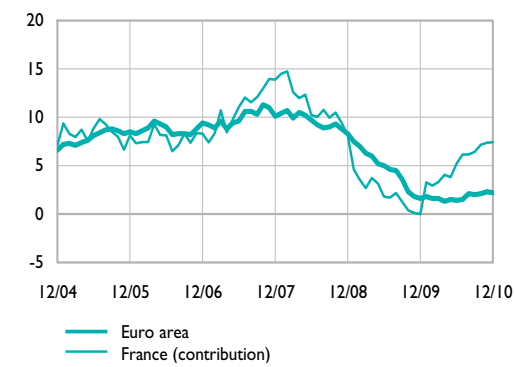
M1

(annual percentage growth rate)



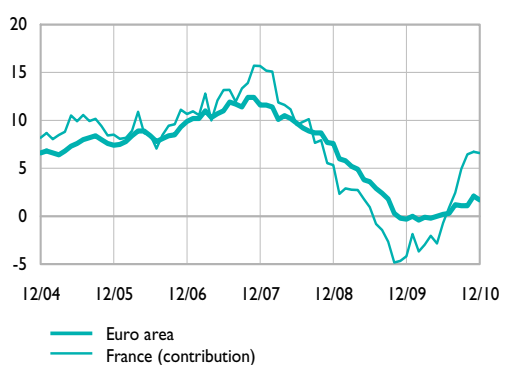
M2

(annual percentage growth rate)



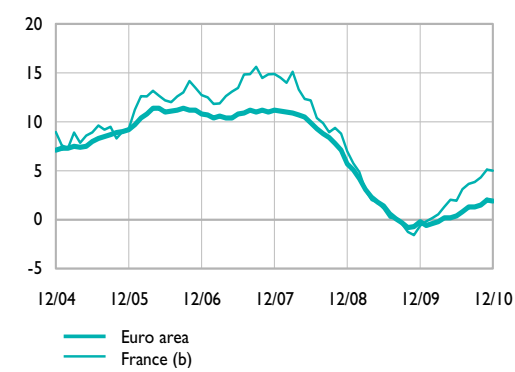
M3

(annual percentage growth rate)



Loans to the private sector

(annual percentage growth rate)



(a) Seasonal and calendar effect adjusted data.
(b) Loans extended by MFIs resident in France to euro area residents excluding MFIs and central government.

Sources: Banque de France, European Central Bank.

Produced 23 February 2011

Table 12
Balance sheet of the Banque de France

(outstanding amounts at the end of the period, EUR billions)

	2008	2009	2010	2009	2010			
	Dec.	Dec.	Dec.	Dec.	Sept.	Oct.	Nov.	Dec.
Assets								
National territory	220.2	165.1	86.8	165.1	83.9	81.1	82.6	86.8
Loans	190.7	129.1	42.3	129.1	42.4	41.8	41.1	42.3
MFIs	*190.6*	*129.0*	*42.1*	*129.0*	*42.3*	*41.6*	*40.9*	*42.1*
Central government	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Private sector	*0.2*	*0.1*	*0.2*	*0.1*	*0.1*	*0.1*	*0.2*	*0.2*
Securities other than shares	29.5	35.9	44.5	35.9	41.5	39.3	41.5	44.5
MFIs	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Central government	*29.5*	*35.9*	*44.5*	*35.9*	*41.5*	*39.3*	*41.5*	*44.5*
Private sector	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Money market instruments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shares and other equity	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other euro area countries	60.6	77.1	85.9	77.1	84.0	85.9	85.6	85.9
Rest of the world	110.7	96.3	98.9	96.3	97.9	93.8	99.2	98.9
Gold	49.8	60.0	82.6	60.0	75.0	76.8	83.4	82.6
Not broken down by geographical area (a)	115.8	111.7	131.0	111.7	105.0	107.2	115.8	131.0
Total	**557.1**	**510.1**	**485.3**	**510.1**	**445.8**	**444.8**	**466.6**	**485.3**
Liabilities								
National territory – Deposits	105.1	84.5	51.2	84.5	41.3	47.9	62.0	51.2
MFIs	94.3	64.9	49.3	64.9	40.3	47.0	60.9	49.3
Central government	10.3	18.0	1.5	18.0	0.6	0.5	0.5	1.5
Other sectors (overnight deposits)	0.5	1.6	0.4	1.6	0.4	0.4	0.6	0.4
Other euro area countries – Deposits	117.7	62.0	28.3	62.0	31.4	23.1	11.8	28.3
MFIs	117.7	62.0	28.3	62.0	31.4	23.1	11.8	28.3
Other sectors	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rest of the world – Deposits	99.4	112.7	122.9	112.7	103.8	104.3	112.6	122.9
Not broken down by geographical area	234.9	250.9	282.9	250.9	269.3	269.5	280.2	282.9
Currency in circulation (b)	147.3	153.7	160.1	153.7	155.1	155.4	155.8	160.1
Debt securities issued	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Money market instruments	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Capital and reserves	58.6	70.6	97.6	70.6	89.4	91.3	96.0	97.6
Other	29.0	26.6	25.2	26.6	24.8	22.8	28.5	25.2
Total	**557.1**	**510.1**	**485.3**	**510.1**	**445.8**	**444.8**	**466.6**	**485.3**

(a) Including adjustments for the new accounting method for banknotes on the liability side of the Banque de France balance sheet since January 2002.
(b) Since January 2002, banknotes in circulation have been treated according to specific euro area accounting conventions. 8% of the total value of euro banknotes in circulation is allocated to the European Central Bank. The remaining 92% is broken down between the NCBs in proportion to their share in the paid-up capital of the ECB.

Source: Banque de France. *Produced 23 February 2011*

Table 13
Balance sheet of monetary financial institutions (MFIs) excluding the Banque de France

(outstanding amounts at the end of the period in EUR billions)

	2008	2009	2010	2009	2010			
	Dec.	Dec.	Dec.	Dec.	Sept.	Oct.	Nov.	Dec.
Assets								
National territory	4,517.7	4,527.2	4,568.2	4,527.2	4,640.7	4,560.1	4,620.8	4,568.2
Loans	3,493.6	3,509.9	3,562.1	3,509.9	3,616.4	3,542.2	3,589.6	3,562.1
MFIs	*1,480.2*	*1,486.5*	*1,413.9*	*1,486.5*	*1,512.5*	*1,431.9*	*1,454.5*	*1,413.9*
General government	*173.8*	*196.1*	*217.8*	*196.1*	*202.9*	*201.9*	*204.7*	*217.8*
Private sector	*1,839.6*	*1,827.4*	*1,930.4*	*1,827.4*	*1,901.0*	*1,908.4*	*1,930.4*	*1,930.4*
Securities other than shares	636.2	622.6	613.6	622.6	630.7	625.9	634.5	613.6
MFIs ≤ 2 years	*242.6*	*229.8*	*208.5*	*229.8*	*213.7*	*204.0*	*211.6*	*208.5*
MFIs > 2 years	*121.8*	*113.4*	*134.8*	*113.4*	*129.3*	*133.1*	*137.0*	*134.8*
General government	*149.7*	*159.7*	*152.1*	*159.7*	*160.8*	*164.7*	*164.7*	*152.1*
Private sector	*122.1*	*119.8*	*118.3*	*119.8*	*126.9*	*124.2*	*121.1*	*118.3*
Money market fund shares/units	90.3	79.1	52.6	79.1	57.3	56.2	56.7	52.6
Shares and other equity	297.7	315.5	339.9	315.5	336.3	335.8	340.0	339.9
Other euro area countries	1,006.4	1,034.4	1,020.2	1,034.4	1,048.6	1,047.6	1,045.1	1,020.2
Rest of the world	926.0	848.2	962.9	848.2	958.8	994.9	1,013.4	962.9
Not broken down by geographical area	1,260.4	1,247.1	1,278.7	1,247.1	1,503.0	1,456.4	1,403.1	1,278.7
Total	**7,710.6**	**7,656.7**	**7,830.1**	**7,656.7**	**8,151.0**	**8,058.9**	**8,082.5**	**7,830.1**
Liabilities								
National territory – Deposits	3,043.5	3,099.0	3,035.3	3,099.0	3,128.1	3,032.3	3,030.2	3,035.3
MFIs	1,605.1	1,571.3	1,423.1	1,571.3	1,543.6	1,448.4	1,442.0	1,423.1
Central government	23.4	28.3	28.7	28.3	42.7	27.3	40.0	28.7
Other sectors	1,415.0	1,499.4	1,583.5	1,499.4	1,541.8	1,556.6	1,548.2	1,583.5
Overnight deposits	*434.4*	*463.1*	*502.1*	*463.1*	*474.9*	*483.3*	*476.4*	*502.1*
Deposits with agreed maturity ≤ 2 years	*185.3*	*131.3*	*133.4*	*131.3*	*131.2*	*138.4*	*137.9*	*133.4*
Deposits with agreed maturity > 2 years	*260.9*	*362.4*	*377.0*	*362.4*	*370.7*	*366.6*	*368.4*	*377.0*
Deposits redeemable at notice ≤ 3 months	*486.0*	*501.1*	*518.8*	*501.1*	*510.0*	*510.9*	*510.6*	*518.8*
Repos	*48.5*	*41.5*	*52.3*	*41.5*	*55.0*	*57.4*	*54.8*	*52.3*
Other euro area countries – Deposits	377.6	338.3	380.4	338.3	379.6	387.5	395.6	380.4
MFIs	277.6	229.3	220.6	229.3	226.1	227.9	231.3	220.6
Other sectors	100.1	109.0	159.9	109.0	153.5	159.6	164.3	159.9
Rest of the world – Deposits	985.3	880.9	968.9	880.9	958.7	1,002.8	1,047.7	968.9
Not broken down by geographical area	3,304.1	3,338.6	3,445.4	3,338.6	3,684.6	3,636.4	3,609.0	3,445.4
Debt securities issued ≤ 2 years	*458.6*	*381.4*	*409.8*	*381.4*	*407.7*	*401.0*	*416.6*	*409.8*
Debt securities issued > 2 years	*689.3*	*715.2*	*754.9*	*715.2*	*752.3*	*753.3*	*763.7*	*754.9*
Money market fund shares/units	483.3	479.2	394.3	479.2	419.7	414.0	418.7	394.3
Capital and reserves	416.1	454.7	476.7	454.7	471.9	471.3	473.3	476.7
Other	1,256.8	1,308.1	1,409.8	1,308.1	1,633.1	1,596.7	1,536.8	1,409.8
Total	**7,710.6**	**7,656.7**	**7,830.1**	**7,656.7**	**8,151.0**	**8,058.9**	**8,082.5**	**7,830.1**

NB: Since July 2003, financial transactions carried out by La Poste have been accounted for in the balance sheet of monetary financial institutions. This has resulted in an increase in the item "Shares and other equity" in Assets, and in "Overnight deposits" and "Capital and reserves" in Liabilities.

Source: Banque de France.

Produced 23 February 2011

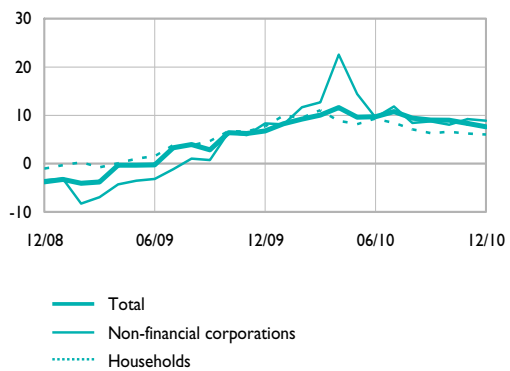
Table 14
Deposits – France

(outstanding amounts at the end of the period in EUR billions – % growth)

	2008	2009	2010	2009	2010			
	Dec.	Dec.	Dec.	Dec.	Sept.	Oct.	Nov.	Dec.
Overnight deposits								
Total non-financial sectors (excluding central government)	447.8	481.1	516.3	481.1	481.2	483.9	479.1	516.3
Households and similar	*243.7*	*262.4*	*278.4*	*262.4*	*269.7*	*274.8*	*267.5*	*278.4*
Non-financial corporations	*154.5*	*167.0*	*182.5*	*167.0*	*161.5*	*160.3*	*163.8*	*182.5*
General government (excl. central government)	*49.6*	*51.7*	*55.4*	*51.7*	*50.0*	*48.7*	*47.7*	*55.4*
Other sectors	33.6	32.6	38.7	32.6	40.3	43.9	41.6	38.7
Total – Outstanding amounts	**481.4**	**513.7**	**555.1**	**513.7**	**521.5**	**527.7**	**520.7**	**555.1**
Total – Growth rate	**-3.8**	**6.8**	**7.6**	**6.8**	**9.0**	**9.0**	**8.3**	**7.6**
Passbook savings accounts								
"A" and "Blue" passbooks	164.4	183.4	193.5	183.4	190.0	189.8	189.7	193.5
Housing savings accounts	36.7	36.6	36.1	36.6	35.9	35.8	35.7	36.1
Sustainable development passbook accounts	70.2	69.1	68.0	69.1	67.9	67.7	67.1	68.0
People's savings passbooks	62.0	58.3	54.4	58.3	55.7	55.6	55.3	54.4
Youth passbooks	7.4	7.2	7.0	7.2	7.1	7.1	7.1	7.0
Taxable passbooks	145.4	146.5	159.8	146.5	153.5	154.9	155.8	159.8
Total – Outstanding amounts	**486.0**	**501.1**	**518.8**	**501.1**	**510.0**	**510.9**	**510.6**	**518.8**
Total – Growth rate	**11.1**	**3.1**	**3.5**	**3.1**	**2.0**	**2.5**	**3.3**	**3.5**

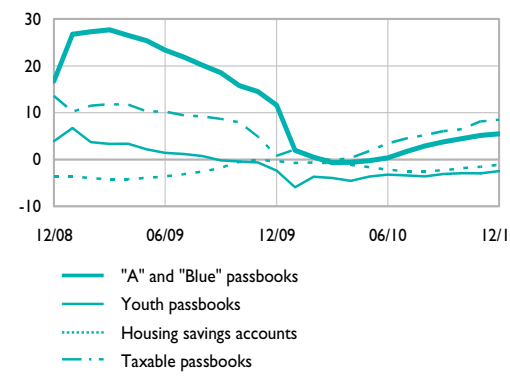
Overnight deposits

(annual growth rate)



Passbook savings accounts

(annual growth rate)



Source: Banque de France.

Produced 23 February 2011

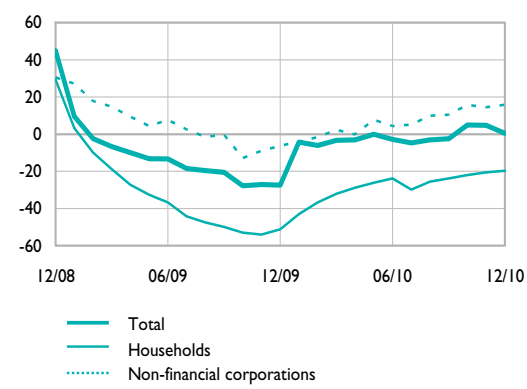
Table 15
Time deposits – France

(outstanding amounts at the end of the period in EUR billions – % growth)

	2008	2009	2010	2009	2010			
	Dec.	Dec.	Dec.	Dec.	Sept.	Oct.	Nov.	Dec.
Deposits with agreed maturity up to two years								
Total non-financial sectors (excl. central government)	121.9	86.1	89.1	86.1	84.1	86.5	86.6	89.1
Households and similar	*62.4*	*30.4*	*24.5*	*30.4*	*25.4*	*25.1*	*24.8*	*24.5*
Non-financial corporations	*58.8*	*55.1*	*63.9*	*55.1*	*57.9*	*60.6*	*61.1*	*63.9*
General government (excl. central government)	*0.8*	*0.6*	*0.7*	*0.6*	*0.8*	*0.7*	*0.7*	*0.7*
Other sectors	63.4	45.1	44.2	45.1	47.1	51.9	51.3	44.2
Total – Outstanding amounts	**185.3**	**131.3**	**133.4**	**131.3**	**131.2**	**138.4**	**137.9**	**133.4**
Total – Growth rate	**45.0**	**-27.4**	**0.5**	**-27.4**	**-2.5**	**4.9**	**4.8**	**0.5**
Deposits with agreed maturity of over two years								
Total non-financial sectors (excl. central government)	236.5	264.3	282.5	264.3	274.5	274.9	275.9	282.5
Households and similar	*223.2*	*241.4*	*248.0*	*241.4*	*242.8*	*242.8*	*243.0*	*248.0*
PEL	*168.7*	*173.8*	*182.3*	*173.8*	*177.1*	*177.3*	*177.4*	*182.3*
PEP	*29.3*	*29.0*	*26.6*	*29.0*	*26.7*	*26.5*	*26.3*	*26.6*
Other	*25.1*	*38.6*	*39.1*	*38.6*	*39.0*	*39.0*	*39.3*	*39.1*
Non-financial corporations	*13.3*	*22.5*	*34.0*	*22.5*	*31.1*	*31.5*	*32.3*	*34.0*
General government (excl. central government)	*0.1*	*0.4*	*0.6*	*0.4*	*0.6*	*0.6*	*0.6*	*0.6*
Other sectors	24.4	98.1	94.4	98.1	96.3	91.7	92.5	94.4
Total – Outstanding amounts	**260.9**	**362.4**	**377.0**	**362.4**	**370.7**	**366.6**	**368.4**	**377.0**
Total – Growth rate	**-5.9**	**38.1**	**3.5**	**38.1**	**6.1**	**3.9**	**3.3**	**3.5**

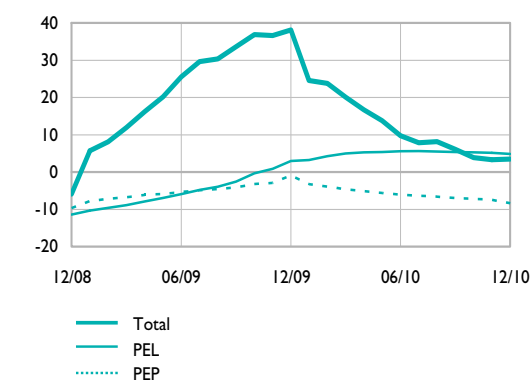
Deposits up to 2 years

(annual percentage growth rate)



Deposits over 2 years

(annual percentage growth rate)



Sources: Banque de France, European Central Bank.

Produced 23 February 2011

Table 16
Loans extended by credit institutions established in France to French residents – France

(outstanding amounts at the end of the period in EUR billions – % growth)

	2008	2009	2010	2009	2010				
	Dec.	Dec.	Dec.	Dec.	Aug.	Sept.	Oct.	Nov.	Dec.
Loans from monetary financial institutions									
Private sector	1,839.8	1,827.5	1,930.6	1,827.5	1,892.2	1,901.2	1,908.6	1,930.5	1,930.6
General government	173.8	196.1	217.8	196.1	203.4	202.9	201.9	204.7	217.8
Total – Outstanding amounts	**2,013.5**	**2,023.6**	**2,148.4**	**2,023.6**	**2,095.7**	**2,104.0**	**2,110.4**	**2,135.2**	**2,148.4**
Private sector	6.2	-0.6	4.7	-0.6	2.7	3.1	3.7	4.5	4.7
General government	3.1	12.8	11.0	12.8	12.8	12.7	9.5	8.4	11.0
Total – Growth rate	**5.9**	**0.5**	**5.3**	**0.5**	**3.6**	**4.0**	**4.2**	**4.9**	**5.3**
Loans from credit institutions to non-financial corporations									
Fixed investment	312.6	323.9	335.7	323.9	331.4	329.8	330.9	333.6	335.7
Inventories and working capital	216.2	184.5	177.9	184.5	174.4	174.8	178.2	177.9	177.9
Other lending	252.9	260.9	267.2	260.9	265.5	267.3	266.8	267.8	267.2
Total – Outstanding amounts	**781.6**	**769.3**	**780.8**	**769.3**	**771.3**	**771.9**	**775.9**	**779.4**	**780.8**
Total – Growth rate	**9.5**	**-1.2**	**1.2**	**-1.2**	**0.4**	**1.0**	**1.1**	**1.7**	**1.2**
Loans from credit institutions to households									
Loans for house purchase	710.0	737.6	796.6	737.6	767.8	773.3	776.2	782.2	796.6
Consumer loans	145.5	152.9	154.7	152.9	151.6	152.0	151.9	153.1	154.7
Other lending	84.7	84.2	87.1	84.2	86.8	87.3	87.0	87.1	87.1
Total – Outstanding amounts	**940.1**	**974.7**	**1,038.4**	**974.7**	**1,006.2**	**1,012.6**	**1,015.1**	**1,022.4**	**1,038.4**
Total – Growth rate	**7.3**	**4.0**	**6.6**	**4.0**	**5.5**	**5.8**	**5.9**	**6.1**	**6.6**

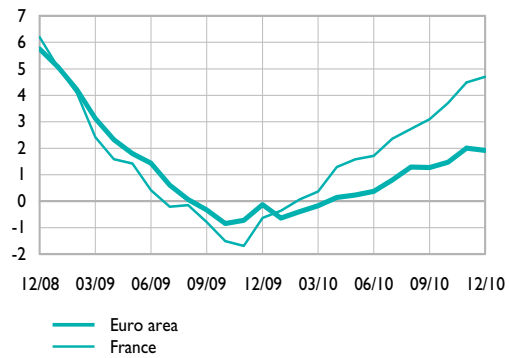
Source: Banque de France.

Produced 23 February 2011

Table 17
Loans from credit institutions broken down by counterpart and by financing purpose – France (a) and euro area

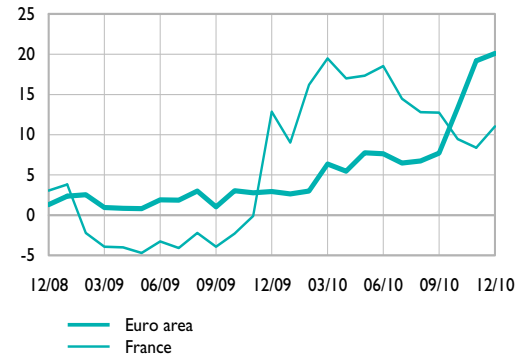
Loans to the private sector

(annual percentage growth rate)



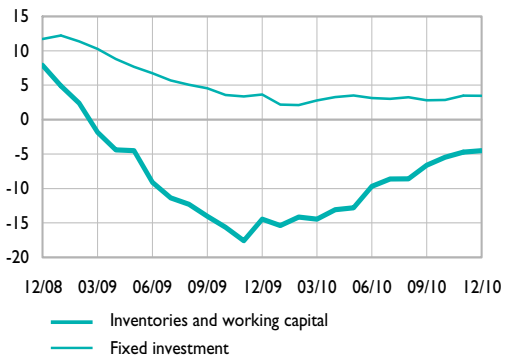
Loans to the public sector

(annual percentage growth rate)



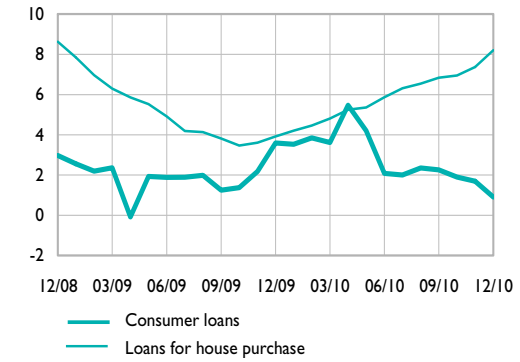
Loans to non-financial corporations – France

(annual percentage growth rate)



Loans to households – France

(annual percentage growth rate)



(a) Loans extended by credit institutions established in France to French residents.

Sources: Banque de France, European Central Bank.

Produced 23 February 2011

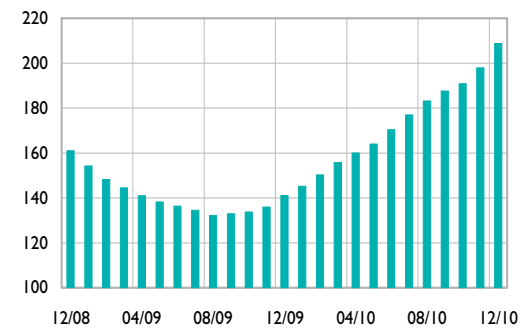
Table 18
New loans to residents – France

(excl. overdrafts, cumulative amounts over 12 months in EUR billions)

	2009			2010		
	Oct.	Nov.	Dec.	Oct.	Nov.	Dec.
Total – new loans	**365.0**	**367.1**	**373.2**	**425.8**	**432.5**	**443.2**
Loans to households	**133.7**	**136.0**	**141.1**	**190.9**	**197.9**	**208.8**
Consumer loans (excl. overdrafts)	51.1	51.6	52.1	51.4	51.0	50.9
Loans for house purchase with an IRFP ≤ 1 year (a)	8.3	8.9	10.0	17.2	17.8	18.0
Loans for house purchase with an IRFP > 1 year (a)	74.3	75.5	79.0	122.3	129.2	139.9
Loans to non-financial corporations	**231.2**	**231.1**	**232.1**	**234.9**	**234.6**	**234.4**
Loans with an IRFP ≤ 1 year (excl. overdrafts) (a)	157.6	157.3	157.4	154.9	154.5	154.8
Loans with an IRFP > 1 year (a)	73.6	73.8	74.7	80.0	80.1	79.7

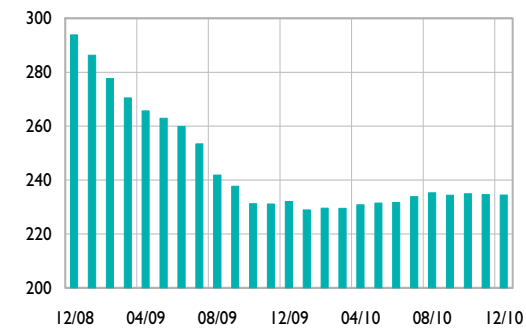
Loans to households

(EUR billions)



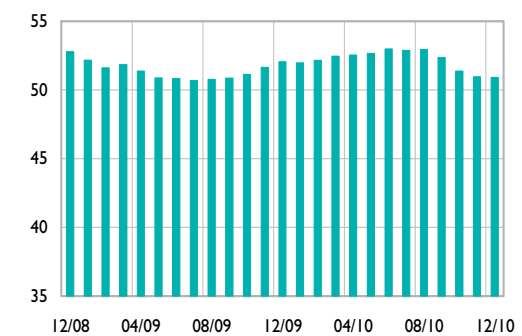
Loans to non-financial corporations

(EUR billions)



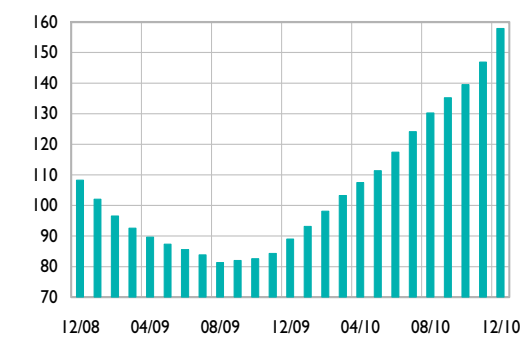
Consumer loans to households (excl. overdrafts)

(EUR billions)



Loans for house purchase

(EUR billions)



Data revised over the entire period.

(a) IRFP: initial rate fixation period i.e. the period for which the rate of a loan is fixed.
IRFP ≤ 1 year: loans for which the rate is adjusted at least once a year + fixed-rate loans with an initial maturity of up to 1 year.
IRFP > 1 year: loans for which the rate is adjusted less than once a year + fixed-rate loans with an initial maturity of over 1 year.

Sources: Banque de France, European Central Bank. *Produced 23 February 2011*

Table 19
Investment and financing – Insurance corporations and pension funds – Euro area and France

(EUR billions)

Euro area	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2009		2010			2010
	Q3	Q4	Q1	Q2	Q3	Sept.
Financial assets						
Currency and deposits	27.8	-13.7	-18.9	-2.7	1.3	862.8
of which deposits included in M3 (a)	*-0.8*	*-33.2*	*-20.9*	*2.2*	*5.5*	*201.6*
Short-term debt securities	38.3	55.2	36.9	29.8	42.2	417.4
Long-term debt securities	-5.0	49.5	83.3	140.6	154.6	2,249.7
Loans	28.3	15.0	12.5	13.2	17.9	483.2
Shares and other equity	97.1	132.9	177.0	120.7	105.0	2,404.0
of which quoted shares	*-100.1*	*-88.2*	*-82.6*	*-82.1*	*-0.9*	*434.7*
Remaining net assets	6.7	4.6	25.4	18.0	17.4	285.4
Financing						
Debt securities	10.0	1.0	0.4	5.7	3.6	58.3
Loans	11.7	-25.3	-16.0	-10.6	11.7	284.3
Shares and other equity	4.9	3.3	2.6	3.3	4.9	485.9
Insurance technical reserves	199.5	271.5	319.0	300.5	293.9	5,903.4
Life insurance	*192.7*	*257.4*	*304.0*	*290.8*	*285.7*	*5,142.2*
Non-life insurance	*6.8*	*14.1*	*15.0*	*9.7*	*8.2*	*761.2*
Net lending/net borrowing (B9B)	**-32.9**	**-7.1**	**10.2**	**20.8**	**24.3**	

(EUR billions)

France	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2009		2010			2010
	Q3	Q4	Q1	Q2	Q3	Sept.
Financial assets						
Currency and deposits	-0.7	-0.9	-0.8	0.7	-0.9	22.0
of which deposits included in M3 (a)	*-1.4*	*-1.4*	*-0.6*	*1.2*	*1.8*	*11.7*
Short-term debt securities	40.5	60.8	50.1	35.5	43.9	388.3
Long-term debt securities	19.3	23.1	51.5	56.4	64.6	782.7
Loans	3.1	2.7	3.1	2.4	1.8	41.8
Shares and other equity	-5.7	-12.4	-5.4	9.1	6.5	669.9
of which quoted shares	*-5.0*	*-0.8*	*1.3*	*-1.9*	*1.0*	*74.9*
Remaining net assets	1.5	4.3	9.2	8.7	4.6	31.6
Financing						
Debt securities	3.1	-2.0	-1.1	3.2	4.5	36.9
Loans	-1.5	-12.1	-13.5	-13.1	-1.9	72.6
Shares and other equity	2.2	3.8	4.6	4.3	3.5	139.2
Insurance technical reserves	74.7	92.9	108.4	103.7	104.1	1,585.9
Life insurance	*71.3*	*88.4*	*103.6*	*99.1*	*99.8*	*1,430.9*
Non-life insurance	*3.3*	*4.4*	*4.8*	*4.7*	*4.2*	*155.0*
Net lending/net borrowing (B9B)	**-20.6**	**-4.9**	**9.2**	**14.7**	**10.4**	

(a) Deposits with agreed maturity up to 2 years and redeemable at notice up to 3 months of insurance corporations held with MFIs and central government.

Sources: Banque de France, European Central Bank. *Produced 23 February 2011*

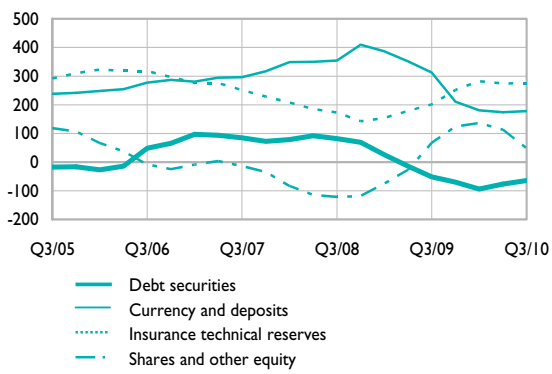
Table 20
Investment and financing – Households – Euro area

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2009		2010			2010
	Q3	Q4	Q1	Q2	Q3	Sept.
Financial assets						
Currency and deposits	312.8	210.8	180.6	174.3	178.1	6,510.4
of which deposits included in M3 (a)	*206.8*	*93.0*	*33.0*	*29.4*	*55.6*	*4,942.6*
Short-term debt securities	-65.0	-75.4	-67.7	-56.4	-24.8	48.9
Long-term debt securities	13.5	5.9	-26.4	-19.6	-39.1	1,348.4
Shares and other equity	67.4	124.0	136.7	113.3	47.9	4,302.1
Quoted shares	45.3	38.0	39.2	26.9	10.4	731.3
Unquoted shares and other equity	49.5	60.8	71.1	75.6	53.9	2,125.2
Mutual fund shares	-27.5	25.3	26.4	10.8	-16.4	1,445.5
of which money market fund shares	*-20.0*	*-47.6*	*-83.7*	*-84.8*	*-95.9*	*201.0*
Insurance technical reserves	201.5	251.7	282.3	274.4	275.4	5,783.9
Remaining net assets	-13.4	12.0	0.3	-4.0	23.3	-110.4
Financing						
Loans	101.9	111.0	129.9	135.1	136.1	6,005.6
of which from euro area MFIs	*-15.7*	*65.2*	*76.2*	*104.0*	*105.0*	*5,121.6*
Revaluation of financial assets						
Shares and other equity	-132.0	236.1	492.7	139.8	22.9	
Insurance technical reserves	53.9	178.3	268.1	173.7	113.5	
Other flows	79.4	52.0	85.3	38.9	-8.8	
Change in net financial worth	**416.2**	**884.4**	**1,221.9**	**699.3**	**452.5**	

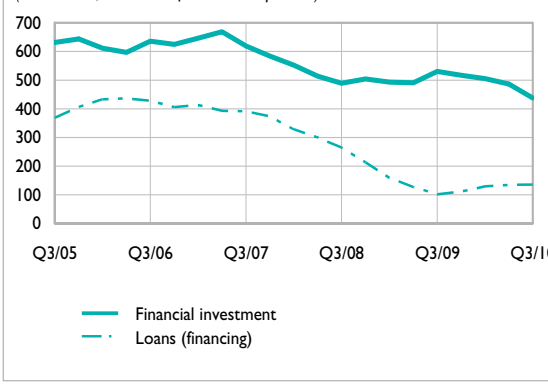
Investment flows

(EUR billions, cumulated flows over 4 quarters)



Investment and financing flows

(EUR billions, cumulated flows over 4 quarters)



(a) Deposits with agreed maturity up to 2 years and redeemable at notice up to 3 months of households held with MFIs and central government.

Source: European Central Bank.

Produced 23 February 2011

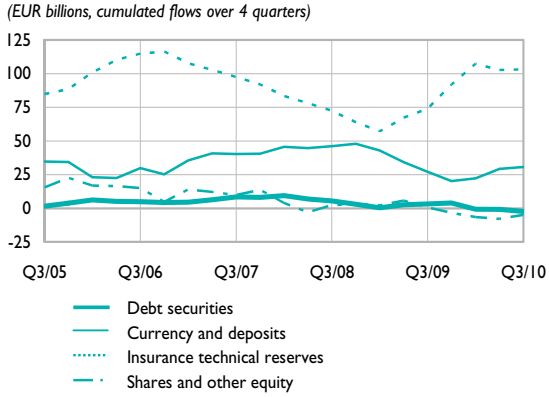
Table 21
Investment and financing – Households – France

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2009		2010			2010
	Q3	Q4	Q1	Q2	Q3	Sept.
Financial assets						
Currency and deposits	27.2	20.2	22.1	29.3	30.7	1,141.1
of which deposits included in M3 (a)	*17.1*	*2.8*	*6.1*	*14.5*	*19.1*	*846.6*
Short-term debt securities	-0.4	-0.5	-1.8	-1.5	-1.1	11.7
Long-term debt securities	3.6	4.4	1.0	0.6	-1.2	47.4
Shares and other equity	0.7	-3.4	-6.5	-7.8	-4.9	939.1
Quoted shares	5.6	2.8	-0.9	0.5	0.3	150.7
Unquoted shares and other equity	8.2	7.7	9.4	8.3	14.6	502.7
Mutual fund shares	-13.1	-13.9	-15.1	-16.6	-19.8	285.7
of which money market fund shares	*-6.7*	*-15.5*	*-19.5*	*-19.5*	*-20.1*	*39.9*
Insurance technical reserves	73.9	91.9	107.4	102.8	103.2	1,560.6
Remaining net assets	11.0	14.6	-4.5	0.5	11.0	-41.8
Financing						
Loans	30.6	36.5	44.5	47.9	51.9	1,057.5
of which from resident MFIs	*17.4*	*32.3*	*38.5*	*49.0*	*56.9*	*1,004.5*
Revaluation of financial assets						
Shares and other equity	0.6	109.4	174.3	79.7	21.9	
Insurance technical reserves	4.0	25.3	37.0	12.8	1.8	
Other flows	12.4	-1.0	5.1	9.3	14.2	
Change in net financial worth	**102.4**	**224.6**	**289.7**	**177.9**	**123.6**	

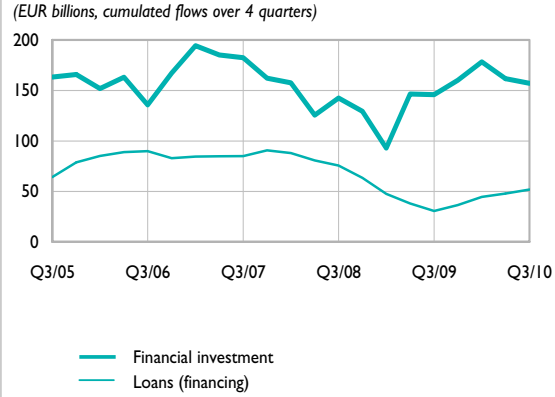
Investment flows

(EUR billions, cumulated flows over 4 quarters)



Investment and financing flows

(EUR billions, cumulated flows over 4 quarters)



(a) Deposits with agreed maturity up to 2 years and redeemable at notice up to 3 months of households held with MFIs and central government.

Source: Banque de France.

Produced 23 February 2011

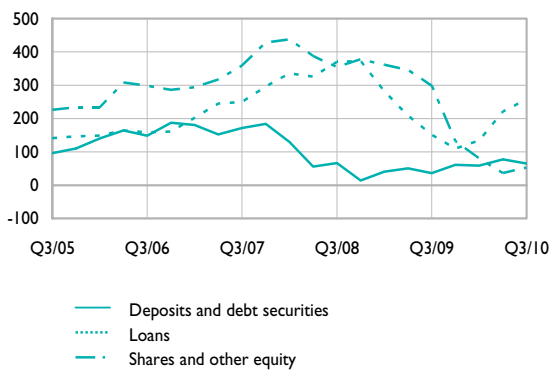
Table 22
Investment and financing – Non-financial corporations – Euro area

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2009		2010			2010
	Q3	Q4	Q1	Q2	Q3	Sept.
Financial assets						
Currency and deposits	77.7	109.0	87.2	53.0	40.5	1,844.6
of which deposits included in M3 (a)	*26.0*	*78.4*	*89.2*	*49.0*	*44.4*	*1,517.4*
Debt securities	-41.9	-48.0	-28.7	24.5	24.6	371.4
Loans	151.5	109.5	134.0	220.7	258.0	3,158.0
Shares and other equity	298.5	132.2	80.3	36.3	53.3	7,692.7
Insurance technical reserves	4.3	4.8	2.3	1.6	0.7	145.5
Remaining net assets	-112.3	-63.5	66.2	18.2	64.4	227.2
Financing						
Debt	233.6	111.8	139.4	162.1	233.7	9,721.2
Loans	140.0	24.9	33.4	77.8	161.9	8,489.9
of which from euro area MFIs	*-10.2*	*-106.8*	*-114.2*	*-83.0*	*-29.7*	*4,689.4*
Debt securities	90.9	84.1	103.0	81.3	68.9	894.4
Pension fund reserves	2.6	2.9	2.9	3.0	2.9	336.8
Shares and other equity	288.2	178.5	169.4	153.8	176.6	12,557.9
Quoted shares	*70.9*	*66.1*	*66.3*	*47.1*	*37.1*	*3,542.5*
Unquoted shares and other equity	*217.4*	*112.3*	*103.1*	*106.7*	*139.5*	*9,015.4*
Net lending/net borrowing (B9B)	**-144.0**	**-46.4**	**32.6**	**38.5**	**31.2**	

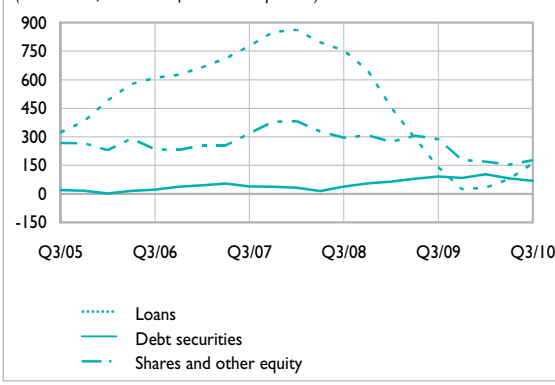
Investment flows

(EUR billions, cumulated flows over 4 quarters)



Financing flows

(EUR billions, cumulated flows over 4 quarters)



(a) Deposits with agreed maturity up to 2 years and redeemable at notice up to 3 months of non-financial corporations held with MFIs and central government.

Source: European Central Bank.

Produced 23 February 2011

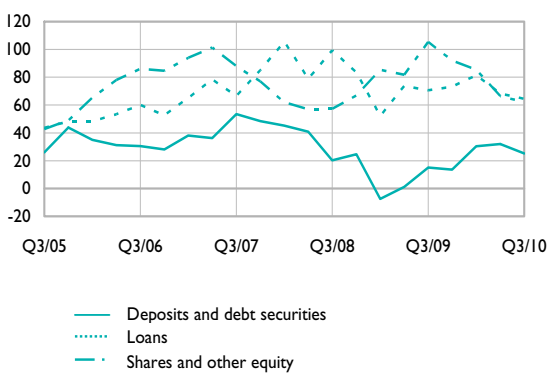
Table 23
Investment and financing – Non-financial corporations – France

(EUR billions)

	Cumulated transaction flows over 4 quarters					Outstanding amounts
	2009		2010			2010
	Q3	Q4	Q1	Q2	Q3	Sept.
Financial assets						
Currency and deposits	22.8	24.0	27.9	24.1	20.6	324.3
of which deposits included in M3 (a)	*5.8*	*11.4*	*20.8*	*19.5*	*20.9*	*236.3*
Debt securities	-7.7	-10.4	2.5	7.8	4.6	107.5
Loans	70.6	73.2	81.4	68.4	64.5	896.9
Shares and other equity	105.4	91.9	85.4	66.5	62.0	2,798.7
Insurance technical reserves	0.6	0.8	0.8	0.7	0.6	20.2
Remaining net assets	-14.6	-14.9	-17.5	-19.0	3.2	95.5
Financing						
Debt	93.0	78.1	78.2	63.0	74.8	2,105.9
Loans	33.9	27.0	26.1	26.1	43.6	1,704.5
of which from resident MFIs	*-2.9*	*-9.8*	*-13.1*	*-0.5*	*7.4*	*776.0*
Debt securities	59.1	51.0	52.1	37.0	31.2	401.3
Shares and other equity	113.4	105.5	106.2	100.7	101.5	4,013.4
Quoted shares	*16.8*	*19.2*	*19.8*	*11.1*	*10.9*	*1,088.5*
Unquoted shares and other equity	*96.6*	*86.3*	*86.3*	*89.6*	*90.6*	*2,925.0*
Net lending/net borrowing (B9B)	**-29.2**	**-19.1**	**-4.0**	**-15.2**	**-20.8**	

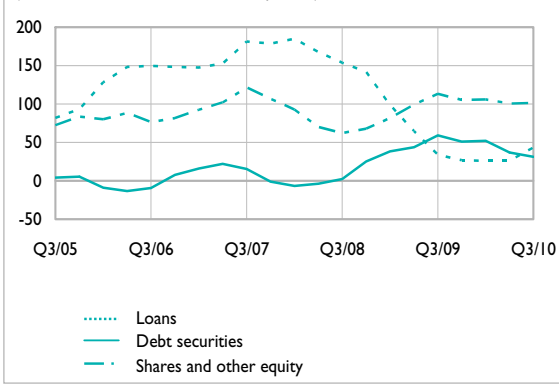
Investment flows

(EUR billions, cumulated flows over 4 quarters)



Financing flows

(EUR billions, cumulated flows over 4 quarters)



(a) Deposits with agreed maturity up to 2 years and redeemable at notice up to 3 months of non-financial corporations held with MFIs and central government.

Source: Banque de France.

Produced 23 February 2011

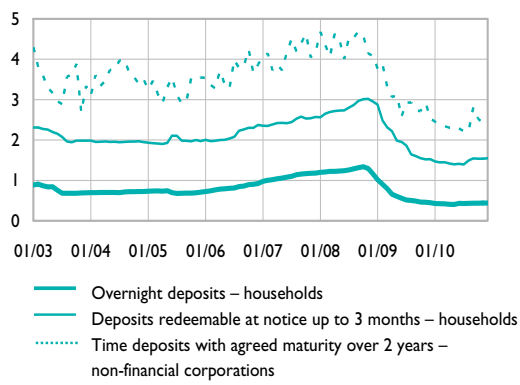
Table 24
Interest rates on deposits – France and the euro area

(average monthly rates – %)

	2009	2010	2009	2010				
	Dec.	Dec.	Dec.	Aug.	Sept.	Oct.	Nov.	Dec.
Euro area								
Overnight deposits – households	0.45	0.44	0.45	0.43	0.43	0.44	0.44	0.44
Deposits redeemable at notice up to 3 months – households	1.53	1.55	1.53	1.50	1.55	1.54	1.54	1.55
Time deposits with agreed maturity over 2 years – non-financial corporations	2.54	2.33	2.54	2.22	2.81	2.53	2.41	2.33
France								
"A" passbooks (end of period)	1.25	1.75	1.25	1.75	1.75	1.75	1.75	1.75
Regulated savings deposits	1.28	1.78	1.28	1.78	1.78	1.78	1.78	1.78
Market rate savings deposits	1.37	1.66	1.37	1.37	1.56	1.57	1.64	1.66
Deposits with agreed maturity up to 2 years	2.39	2.15	2.39	2.11	2.15	2.17	2.13	2.15
Deposits with agreed maturity over 2 years	3.41	3.10	3.41	3.20	3.24	3.13	3.16	3.10

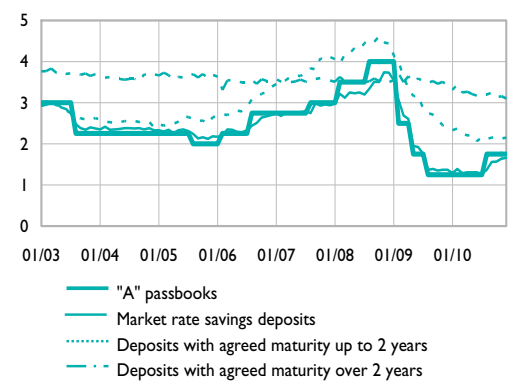
Euro area

(average monthly rates – %)



France

(average monthly rates – %)



Sources: Banque de France, European Central Bank.

Produced 23 February 2011

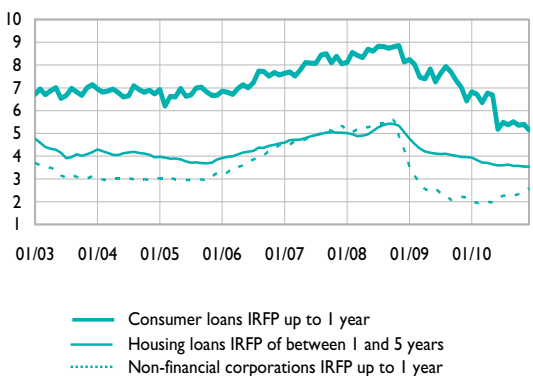
Table 25
Cost of credit – France and the euro area

(average monthly rate – %)

	2010											
	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Euro area												
Consumer loans												
Floating rate and IRFP of up to 1 year (a)	6.83	6.72	6.35	6.78	6.69	5.18	5.48	5.38	5.52	5.36	5.39	5.15
Loans for house purchase												
Floating rate and IRFP of between 1 and 5 years	3.94	3.83	3.72	3.71	3.64	3.59	3.60	3.63	3.57	3.57	3.55	3.54
Non financial corporations of over EUR 1 million												
IRFP of up to 1 year (a)	2.02	1.94	1.99	2.00	1.96	2.17	2.26	2.28	2.26	2.33	2.42	2.59
France												
Consumer loans	**6.52**	**6.31**	**6.26**	**6.18**	**6.20**	**6.18**	**6.13**	**6.08**	**5.96**	**5.78**	**5.79**	**5.74**
Loans for house purchase												
IRFP of up to 1 year (a)	3.33	3.39	3.38	3.27	3.20	3.15	3.17	3.12	3.04	3.04	3.02	3.02
IRFP of over 1 year (a)	3.88	3.85	3.79	3.73	3.69	3.65	3.60	3.54	3.52	3.45	3.44	3.41
Non-financial corporations												
IRFP of up to 1 year (a)	1.69	1.67	1.91	1.92	1.86	1.89	2.00	2.17	2.09	2.20	2.23	2.24
IRFP of over 1 year (a)	3.51	3.47	3.36	3.32	3.27	3.28	3.37	3.47	3.42	3.41	3.47	3.41

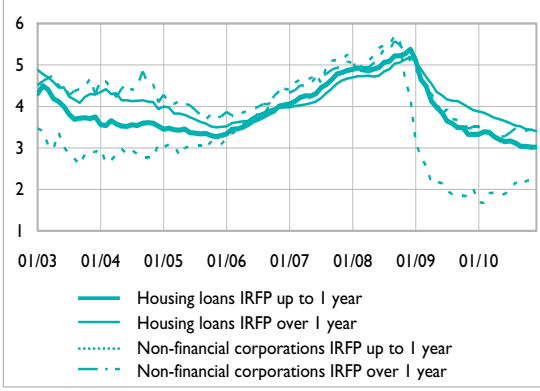
Euro area

(percentage points)



France

(percentage points)



(a) IRFP: initial rate fixation period i.e. the period for which the rate of a loan is fixed.
IRFP ≤ 1 year: loans for which the rate is adjusted at least once a year + fixed-rate loans with an initial maturity of up to 1 year.
IRFP > 1 year: loans for which the rate is adjusted less than once a year + fixed-rate loans with an initial maturity of over 1 year.

Sources: Banque de France, European Central Bank.

Produced 23 February 2011

Table 26
Cost of credit – France

(%)

	2009	2010			
	Q4	Q1	Q2	Q3	Q4
Households – Average overall effective interest rate					
Consumer loans					
Overdrafts, revolving loans and instalment plans of over EUR 1,524	14.78	14.59	14.45	14.49	14.75
Personal loans over EUR 1,524	6.66	6.64	6.46	6.11	5.83
Loans for house purchase					
Fixed-rate loans	4.93	4.72	4.57	4.20	4.13
Floating-rate loans	4.44	4.29	4.01	3.79	3.72

Usury ceilings in effect from the 1st day of the mentioned period	2010				2011
	Jan.	April	July	Oct.	Jan.
Households – Usury rate					
Consumer loans					
Overdrafts, revolving loans and instalment plans of over EUR 1,524	19.71	19.45	19.27	19.32	19.67
Personal loans over EUR 1,524	8.88	8.85	8.61	8.15	7.77
Loans for house purchase					
Fixed-rate loans	6.57	6.29	6.09	5.60	5.51
Floating-rate loans	5.92	5.72	5.35	5.05	4.96

	2009	2010			
	Q4	Q1	Q2	Q3	Q4
Business credit, loans to enterprises					
Discount					
up to EUR 15,245	1.52	1.74	1.75	2.01	2.28
EUR 15,245 to EUR 45,735	2.37	2.84	2.36	2.51	2.78
EUR 45,735 to EUR 76,225	2.34	2.57	2.56	2.57	2.79
EUR 76,225 to EUR 304,898	2.28	2.49	2.12	2.29	2.51
EUR 304,898 to EUR 1,524,490	1.81	1.95	1.97	2.05	2.21
over EUR 1,524,490	1.19	1.22	1.29	1.63	1.79
Overdrafts					
up to EUR 15,245	9.82	9.76	9.69	10.03	10.15
EUR 15,245 to EUR 45,735	6.85	6.85	6.78	7.45	7.08
EUR 45,735 to EUR 76,225	4.19	4.37	4.22	4.64	4.69
EUR 76,225 to EUR 304,898	2.76	3.03	2.83	3.09	3.10
EUR 304,898 to EUR 1,524,490	1.81	1.93	1.88	2.13	2.16
over EUR 1,524,490	1.56	1.27	1.38	1.73	1.73
Other short-term loans					
up to EUR 15,245	3.84	3.60	3.41	3.61	3.62
EUR 15,245 to EUR 45,735	3.46	3.39	3.25	3.32	3.43
EUR 45,735 to EUR 76,225	3.17	3.12	2.98	3.00	3.08
EUR 76,225 to EUR 304,898	2.59	2.52	2.39	2.47	2.64
EUR 304,898 to EUR 1,524,490	1.80	1.85	1.75	1.87	2.01
over EUR 1,524,490	1.43	1.46	1.49	1.69	1.82
Medium and long-term loans					
up to EUR 15,245	3.95	3.37	3.78	3.54	3.43
EUR 15,245 to EUR 45,735	3.81	3.27	3.52	3.40	3.36
EUR 45,735 to EUR 76,225	3.82	3.56	3.54	3.36	3.28
EUR 76,225 to EUR 304,898	3.86	3.64	3.58	3.33	3.35
EUR 304,898 to EUR 1,524,490	3.40	3.36	3.31	3.06	3.18
over EUR 1,524,490	2.64	2.58	2.73	2.64	2.82

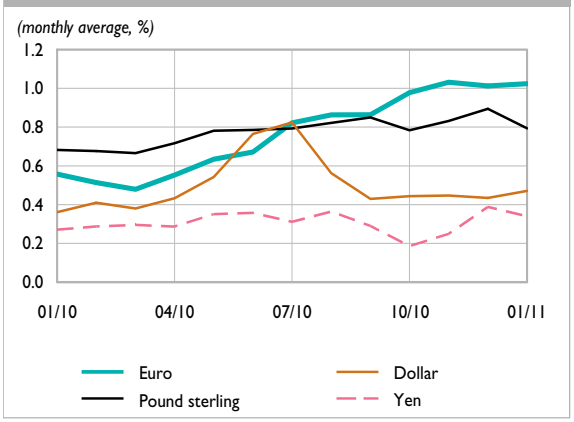
Source: Banque de France. *Produced 23 February 2011*

Table 27
Interest rates

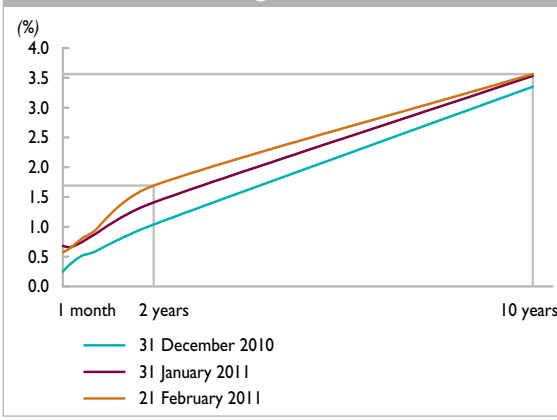
(%)

	Monthly average (a)										Key interest rates at 21/02/11
	2010									2011	
	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	
Short-term interbank interest rates											
Euro											**1.00**
Overnight	0.33	0.34	0.36	0.47	0.39	0.45	0.69	0.57	0.51	0.64	
3-month	0.55	0.63	0.67	0.82	0.86	0.86	0.98	1.03	1.01	1.02	
1-year	1.11	1.13	1.19	1.33	1.39	1.33	1.43	1.43	1.48	1.47	
Pound sterling											**0.50**
Overnight	0.50	0.55	0.52	0.53	0.48	0.56	0.56	0.53	0.52	0.52	
3-month	0.72	0.78	0.79	0.79	0.82	0.85	0.78	0.83	0.89	0.79	
1-year	1.23	1.30	1.62	1.57	1.56	1.51	1.48	1.50	1.72	1.56	
Dollar											**0.25**
Overnight	0.24	0.29	0.30	0.29	0.23	0.21	0.23	0.23	0.24	0.24	
3-month	0.43	0.54	0.77	0.82	0.56	0.43	0.44	0.45	0.43	0.47	
1-year	1.11	1.34	1.38	1.20	1.09	1.06	0.94	0.94	1.05	1.03	
Yen											**0.10**
Overnight	0.15	0.15	0.15	0.15	0.10	0.11	0.11	0.11	0.13	0.12	
3-month	0.29	0.35	0.36	0.31	0.36	0.29	0.19	0.25	0.39	0.34	
1-year	0.57	0.70	0.73	0.63	0.70	0.61	0.48	0.49	0.62	0.55	
10-year benchmark government bond yields											
France	3.40	3.08	3.07	2.99	2.68	2.68	2.72	3.00	3.34	3.44	
Germany	3.09	2.80	2.63	2.65	2.37	2.34	2.38	2.56	2.96	3.06	
Euro area	4.16	3.68	3.70	3.62	3.44	3.50	3.34	3.73	4.07	3.94	
United Kingdom	4.00	3.71	3.48	3.38	3.07	3.02	2.97	3.20	3.50	3.61	
United States	3.86	3.44	3.22	3.01	2.70	2.66	2.52	2.76	3.30	3.40	
Japan	1.35	1.28	1.21	1.10	0.98	1.07	0.89	1.05	1.19	1.22	

3-month interbank market rates



Yield curve for French government bonds



(a) Short-term: the interbank average of rates situated in the middle of the range between bid and ask rates. Quotes taken from Reuters, posted at 4.30pm for the euro and 11.30am for other currencies.
Benchmark bonds: rates posted by Reuters at 4.30pm.

Sources: Banque de France, European Central Bank.

Produced 23 February 2011

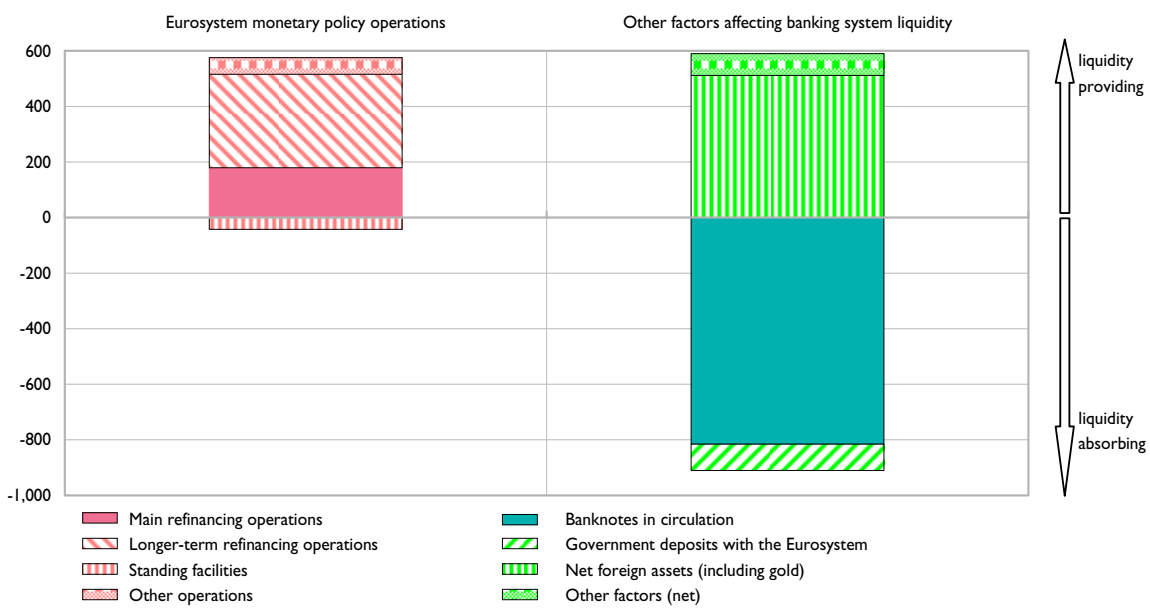
Table 28
Banking system liquidity and refinancing operations – Euro area

(EUR billions, daily average for the reserve maintenance period from 10 November to 7 December 2010)

	Liquidity providing	Liquidity absorbing	Net contribution
Contribution to banking system liquidity			
(a) Eurosystem monetary policy operations	**648.0**	**115.4**	**532.6**
Main refinancing operations	179.5		179.5
Longer-term refinancing operations	336.3		336.3
Standing facilities	1.9	44.7	-42.8
Other	130.4	70.8	59.7
(b) Other factors affecting banking system liquidity	**590.2**	**910.3**	**-320.1**
Banknotes in circulation		815.9	-815.9
Government deposits with the Eurosystem		94.4	-94.4
Net foreign assets (including gold)	511.2		511.2
Other factors (net)	79.1		79.1
(c) Reserves maintained by credit institutions (a) + (b)			**212.5**
including reserve requirements			*211.8*

Net contribution to banking system liquidity

(EUR billions, daily average for the reserve maintenance period from 10 November to 7 December 2010)



Sources: Banque de France, European Central Bank.

Produced 23 February 2011

Table 29
Eurosystem key rates; minimum reserves

(%)

Key rates for the Eurosystem (latest changes)						
Main refinancing operations			Standing facilities			
Date of		Fixed rate	Date of		Deposit	Marginal lending
decision	settlement		decision	settlement		
05/03/2009	11/03/2009	1.50	05/03/2009	11/03/2009	0.50	2.50
02/04/2009	08/04/2009	1.25	02/04/2009	08/04/2009	0.25	2.25
07/05/2009	13/05/2009	1.00	07/05/2009	13/05/2009	0.25	1.75

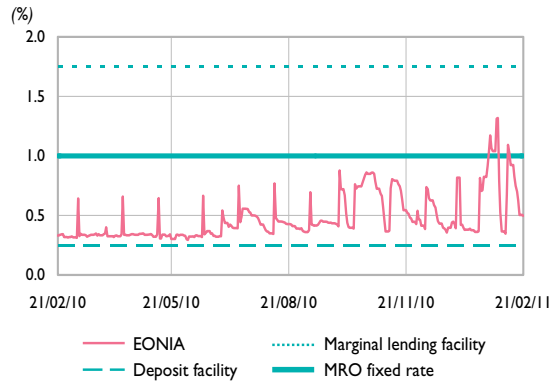
(%)

Main refinancing operations				Longer-term refinancing operations		
		Marginal rate	Weighted average rate			Marginal rate
2011	12 January (a)	1.00	1.00	2010	25 November	1.00
	19 January	1.00	1.00		8 December	1.00
	26 January	1.00	1.00		23 December	1.00
	2 February	1.00	1.00	2011	19 January	1.00
	9 February	1.00	1.00		27 January	1.00
	16 February	1.00	1.00		9 February	1.00

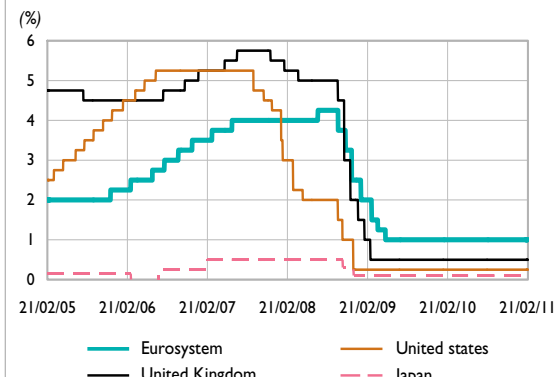
(EUR billions – rates as a %)

Minimum reserves (daily averages)								
Reserve maintenance period ending on		Required reserves		Current accounts		Excess reserves		Interest rate on minimum reserves
		Euro area	France	Euro area	France	Euro area	France	
2010	10 August	214.27	40.51	215.71	40.79	1.44	0.28	1.00
	7 September	213.81	40.46	215.28	40.78	1.47	0.32	1.00
	12 October	211.91	40.89	213.13	41.10	1.22	0.21	1.00
	9 November	214.01	41.51	215.21	41.66	1.20	0.15	1.00
	7 December	211.77	40.74	212.50	40.89	0.73	0.15	1.00
2011	18 January	210.54	41.01	212.37	41.20	1.83	0.19	1.00

Eurosystem key rates and EONIA



Central bank key rates



(a) Fixed rate tender procedure.

Sources: European Central Bank, ESCB.

Produced 23 February 2011

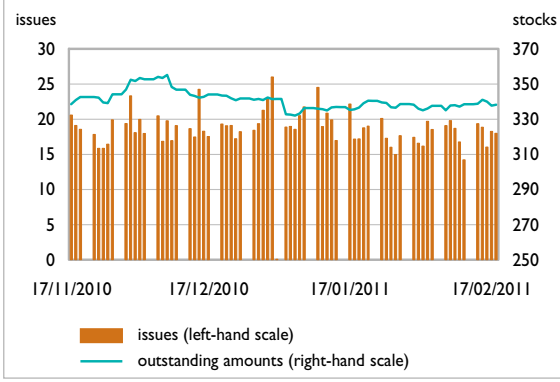
Table 30
Negotiable debt securities – France

Certificates of deposit

	EUR billions (a)		Number of issuers
	Issues	Stocks	
20/11/10 to 26/11/10	85.85	344.22	190
27/11/10 to 03/12/10	98.67	352.72	188
04/12/10 to 10/12/10	93.08	346.77	188
11/12/10 to 17/12/10	96.18	344.10	188
18/12/10 to 24/12/10	92.92	341.78	188
25/12/10 to 31/12/10	107.95	341.46	185
01/01/11 to 07/01/11	98.68	336.29	185
08/01/11 to 14/01/11	101.20	336.98	185
15/01/11 to 21/01/11	94.30	340.47	186
22/01/11 to 28/01/11	86.02	338.57	184
29/01/11 to 04/02/11	88.42	337.65	181
05/02/11 to 11/02/11	88.50	338.48	181
12/02/11 to 18/02/11	90.50	338.19	181

Certificates of deposit

(unadjusted data, EUR billions)

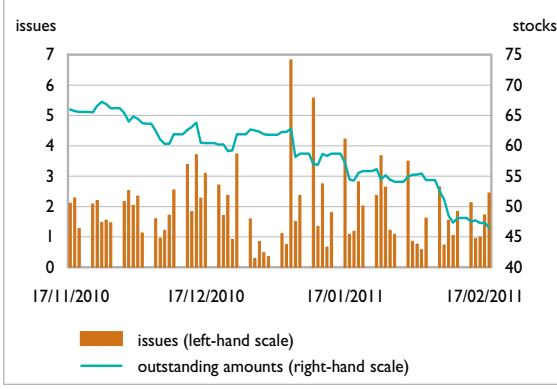


Commercial paper

	EUR billions (a)		Number of issuers
	Issues	Stocks	
20/11/10 to 26/11/10	8.78	66.19	83
27/11/10 to 03/12/10	10.21	63.73	84
04/12/10 to 10/12/10	8.03	61.90	81
11/12/10 to 17/12/10	14.30	60.44	81
18/12/10 to 24/12/10	11.43	61.89	77
25/12/10 to 31/12/10	3.57	61.81	73
01/01/11 to 07/01/11	12.57	58.71	77
08/01/11 to 14/01/11	12.13	58.70	78
15/01/11 to 21/01/11	11.33	55.85	76
22/01/11 to 28/01/11	10.99	54.08	78
29/01/11 to 04/02/11	7.31	54.38	78
05/02/11 to 11/02/11	7.82	48.12	80
12/02/11 to 18/02/11	8.24	46.53	79

Commercial paper

(unadjusted data, EUR billions)

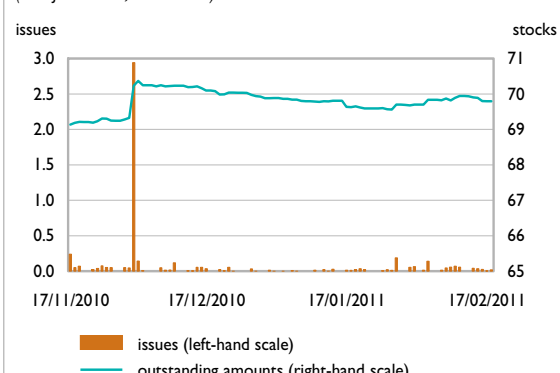


Negotiable medium-term notes

	EUR billions (a)		Number of issuers
	Issues	Stocks	
20/11/10 to 26/11/10	0.24	69.25	130
27/11/10 to 03/12/10	3.19	70.25	130
04/12/10 to 10/12/10	0.20	70.24	131
11/12/10 to 17/12/10	0.16	70.10	131
18/12/10 to 24/12/10	0.09	70.04	132
25/12/10 to 31/12/10	0.06	69.88	131
01/01/11 to 07/01/11	0.02	69.81	130
08/01/11 to 14/01/11	0.07	69.81	130
15/01/11 to 21/01/11	0.11	69.59	130
22/01/11 to 28/01/11	0.23	69.70	126
29/01/11 to 04/02/11	0.28	69.84	126
05/02/11 to 11/02/11	0.25	69.95	126
12/02/11 to 18/02/11	0.13	69.80	126

Negotiable medium-term notes

(unadjusted data, EUR billions)



(a) Issues in euro are cumulative over the reference period. Outstanding amounts are calculated from the cut-off date (the last day of the period under review).

Source: Banque de France. *Produced 23 February 2011*

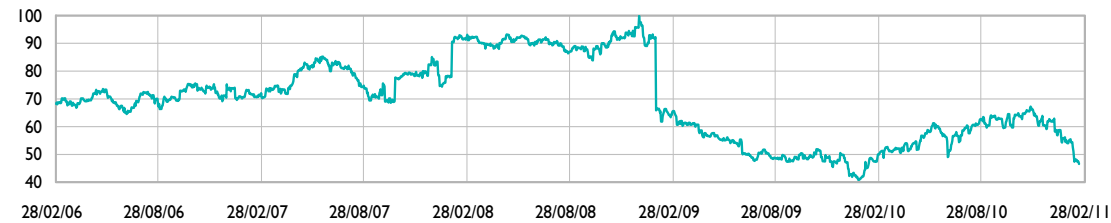
Table 31
Negotiable debt securities – France

Certificates of deposit

(daily outstanding amounts in EUR billions)

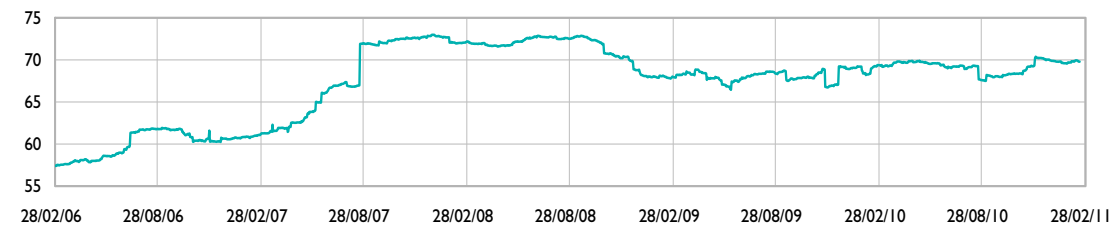
Commercial paper

(daily outstanding amounts in EUR billions)



Negotiable medium-term notes

(daily outstanding amounts in EUR billions)



Negotiable debt securities, cumulated outstandings

(daily outstanding amounts in EUR billions)

Source: Banque de France.

Produced 23 February 2011

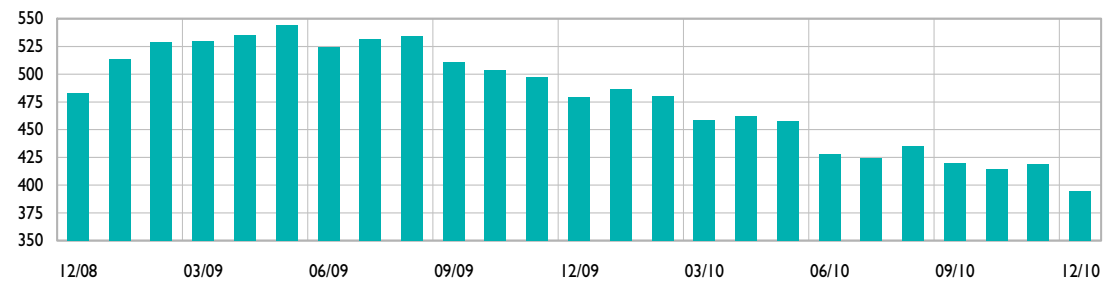
Table 32
Mutual fund shares/units – France

(EUR billions)

	2010			2010
	March	June	Sept.	Dec.
Net assets of mutual fund shares/units by category				
Money-market funds	458.05	428.05	419.66	394.34
Bond mutual funds	205.91	201.27	205.59	
Equity mutual funds	267.97	247.01	258.75	
Mixed funds	262.28	257.30	262.95	
Funds of alternative funds	16.68	16.48	15.77	
Guaranteed-performance mutual funds	0.01	0.01	0.01	
Structured funds ("fonds à formule")	67.22	64.89	63.71	

Net assets of money-market funds

(EUR billions)



Source: Banque de France.

Produced 23 February 2011

Table 33
Debt securities and quoted shares issued by French residents

(EUR billions)

	Outstanding amounts (a)		Net issues (b)			
	2009	2010	12-month	2010		
	Dec. (c)	Dec. (c)	total	Oct. (c)	Nov. (c)	Dec. (c)
Debt securities issued by French residents						
Total	**2,879.3**	**3,101.2**	**195.7**	**7.7**	**24.4**	**-15.7**
Non-financial corporations	345.3	376.9	25.2	4.0	1.6	-2.3
Short-term (≤ 1 year)	*19.3*	*17.2*	*-2.1*	*0.9*	*-1.0*	*-2.7*
Long-term (> 1 year)	*326.0*	*359.7*	*27.4*	*3.1*	*2.6*	*0.4*
General government	1,264.6	1,362.0	93.7	10.1	9.1	-0.9
Short-term (≤ 1 year)	*244.8*	*234.3*	*-11.9*	*-1.2*	*1.4*	*-7.8*
Long-term (> 1 year)	*1,019.8*	*1,127.7*	*105.6*	*11.2*	*7.7*	*6.9*
Monetary financial institutions	1,069.3	1,153.5	71.0	-5.3	11.7	-7.7
Short-term (≤ 1 year)	*294.9*	*299.1*	*4.2*	*-13.7*	*7.2*	*-5.5*
Long-term (> 1 year)	*774.4*	*854.4*	*66.8*	*8.4*	*4.5*	*-2.2*
Non-monetary financial institutions (d)	200.1	208.8	5.8	-1.1	1.9	-4.7

(EUR billions)

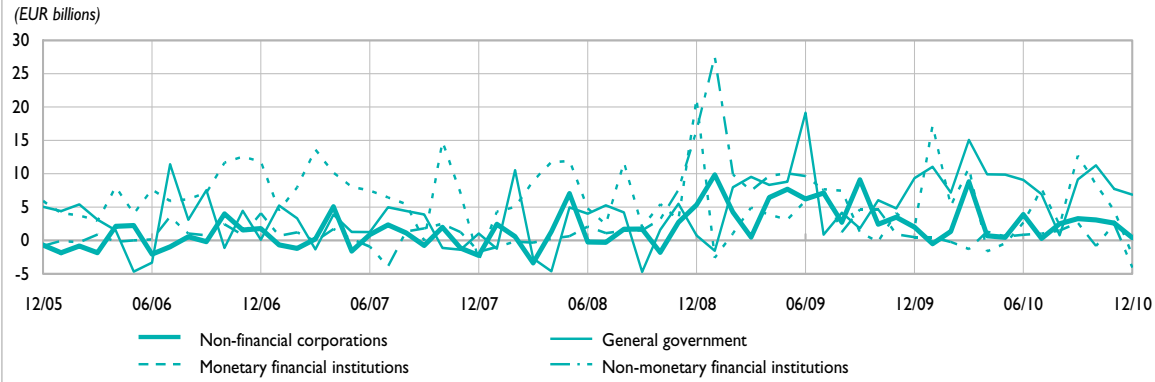
	Outstanding amounts (e)		Net issues (b)			Gross issues (f)	Repurchases (f)
	2009	2010	12-month	2010		12-month	12-month
	Dec.	Dec.	total	Nov.	Dec.	total	total
French quoted shares							
Total	**1,287.3**	**1,318.5**	**9.7**	**0.4**	**-0.8**	**14.5**	**4.8**
Non-financial corporations	1,080.2	1,142.3	7.5	0.2	-0.9	12.3	4.8
Monetary financial institutions	151.1	129.9	1.7	0.1	0.2	1.8	0.0
Non-monetary financial institutions	56.0	46.4	0.5	0.1	0.0	0.5	0.0

(a) Nominal values for outstanding amounts of debt securities.
(b) Monthly data are seasonally adjusted. The 12-month total is unadjusted.
(c) Data possibly revised.
(d) Including units issued by SPVs.
(e) Market values for outstanding amounts of quoted shares.
(f) Non-seasonally adjusted data.

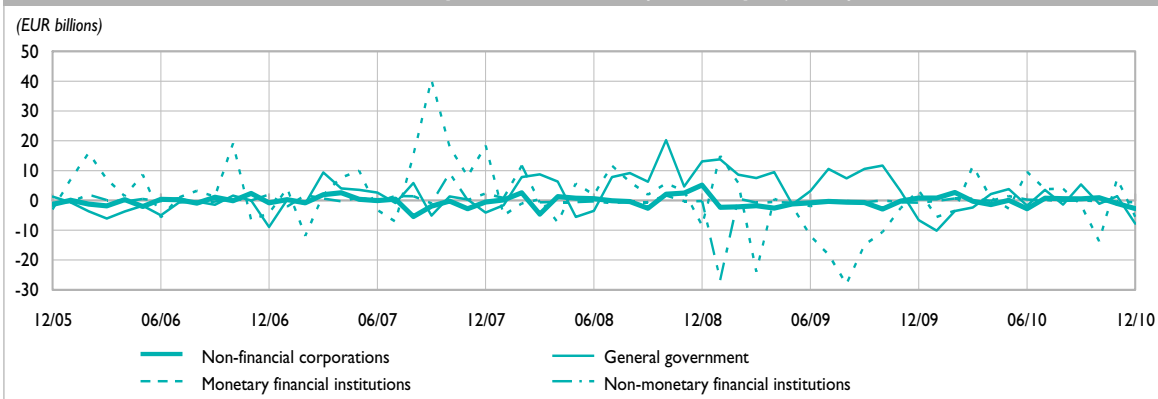
Source: Banque de France. *Produced 23 February 2011*

Table 34
Debt securities and quoted shares issued by French residents, by sector

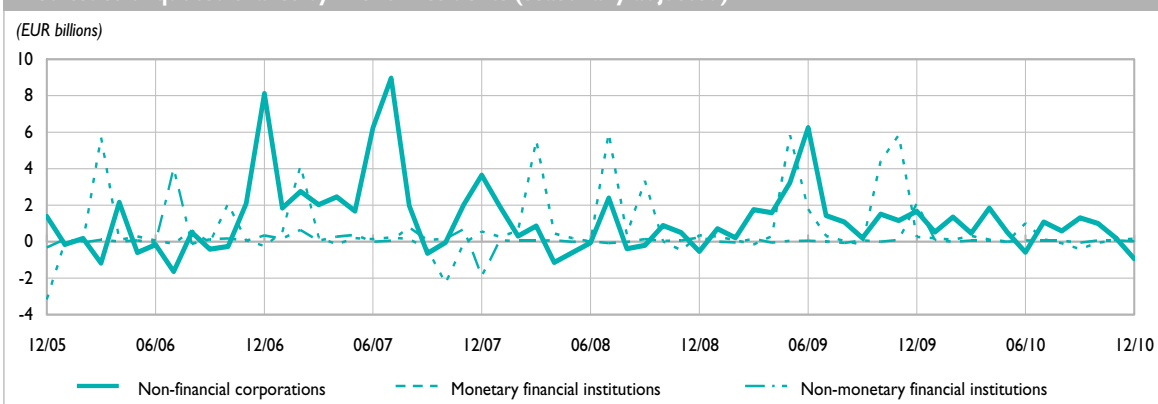
Net issues of long-term debt securities by French residents (seasonally adjusted)



Net issues of short-term debt securities by French residents (seasonally adjusted)



Net issues of quoted shares by French residents (seasonally adjusted)



Source: Banque de France.

Produced 23 February 2011

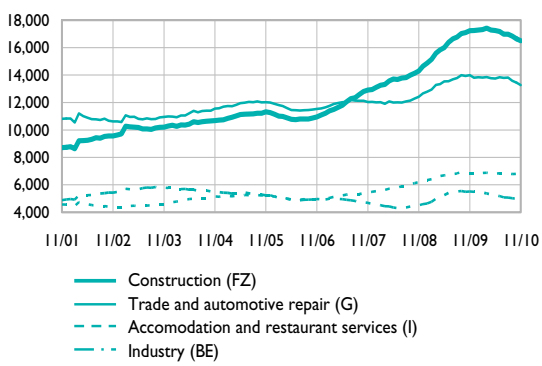
Table 35
Company failures by economic sector – France

(number of companies, unadjusted data, 12-month total)

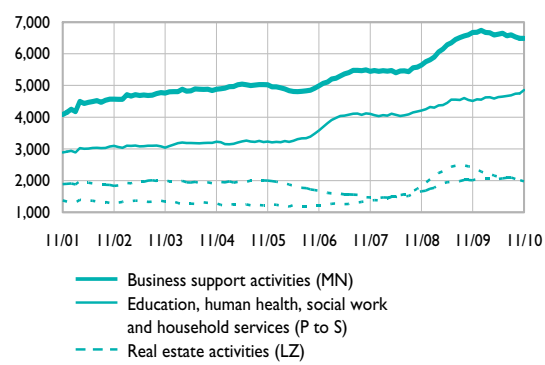
	2009		2010										
	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.
Agriculture, forestry and fishing (AZ)	1,356	1,343	1,364	1,389	1,380	1,361	1,363	1,357	1,354	1,354	1,356	1,336	1,324
Industry (BE)	5,508	5,491	5,477	5,447	5,375	5,299	5,255	5,179	5,086	5,078	5,028	4,993	4,959
Construction (FZ)	17,240	17,254	17,284	17,318	17,423	17,280	17,248	17,182	16,984	16,981	16,839	16,644	16,506
Trade and automotive repair (G)	13,997	13,809	13,839	13,812	13,858	13,769	13,745	13,844	13,792	13,821	13,585	13,448	13,262
Transportation and storage (H)	2,007	2,049	2,056	2,058	2,058	2,030	2,049	2,068	2,091	2,094	2,051	2,038	2,021
Accomodation and restaurant services (I)	6,841	6,833	6,851	6,867	6,884	6,824	6,804	6,849	6,847	6,830	6,788	6,799	6,828
Information and communication sector (JZ)	1,647	1,675	1,675	1,711	1,695	1,665	1,687	1,692	1,658	1,656	1,648	1,637	1,643
Financial and insurance activities (KZ)	1,132	1,134	1,140	1,115	1,101	1,094	1,093	1,105	1,110	1,104	1,086	1,072	1,064
Real estate activities (LZ)	2,430	2,352	2,285	2,224	2,216	2,154	2,127	2,095	2,101	2,095	2,052	2,015	1,975
Business support activities (MN)	6,676	6,682	6,740	6,675	6,666	6,596	6,619	6,649	6,571	6,600	6,533	6,488	6,487
Education, human health, social work and household services (P to S)	4,516	4,567	4,555	4,625	4,630	4,589	4,634	4,650	4,673	4,692	4,744	4,753	4,860
Sector unknown	119	110	104	110	108	105	105	104	106	105	99	100	96
Total sectors	**63,469**	**63,299**	**63,370**	**63,351**	**63,394**	**62,766**	**62,729**	**62,774**	**62,373**	**62,410**	**61,809**	**61,323**	**61,025**

Company failures – 12-month total

(number of companies – unadjusted data)



(number of companies – unadjusted data)



NB: The two-letter codes correspond to the aggregation level A10, and the one-letter codes to revised NAF sections 2 A21.

Source: Banque de France.

Produced 23 February 2011

Table 36
Retail payment systems – France

(daily average in EUR millions, % share for the last month)

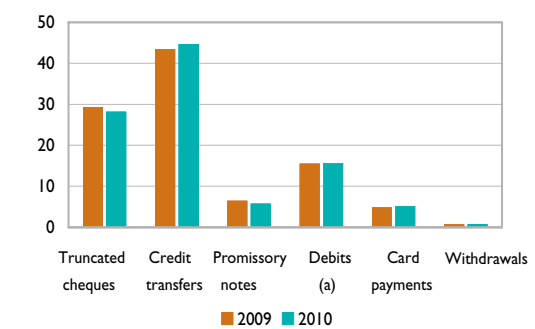
	2007	2008	2009	2010	2010		2011	2011
					Nov.	Dec.	Jan.	Share
Cheques	6,974	6,533	5,700	5,590	5,229	6,142	5,782	28.2
Credit transfers	7,904	8,413	8,473	8,865	8,520	10,279	8,983	43.9
of which SEPA credit transfers	–	29	95	683	1,001	1,736	1,451	7.1
Promissory notes	1,555	1,523	1,250	1,138	1,157	1,201	1,146	5.6
Direct debits	1,739	1,814	1,801	1,827	1,816	1,767	1,925	9.4
Interbank payment orders	150	147	143	133	203	124	99	0.5
Electronic payment orders	975	1,061	1,082	1,141	968	1,350	1,353	6.6
Card payments	864	921	957	1,009	1,008	1,162	1,051	5.1
ATM withdrawals	140	142	143	140	137	138	128	0.6
Total	**20,300**	**20,554**	**19,550**	**19,844**	**19,037**	**22,161**	**20,468**	**100.0**

(daily average in thousands of transactions, % share for the last month)

	2007	2008	2009	2010	2010		2011	2011
					Nov.	Dec.	Jan.	Share
Cheques	11,561	10,996	10,287	9,507	9,373	10,111	9,438	18.8
Credit transfers	7,344	7,425	7,527	7,356	6,952	7,687	7,472	14.9
of which SEPA credit transfers	–	13	38	270	355	800	878	1.7
Promissory notes	370	355	334	311	312	316	299	0.6
Direct debits	7,863	7,864	8,163	8,194	7,895	7,065	8,355	16.6
Interbank payment orders	458	425	394	364	448	375	335	0.7
Electronic payment orders	38	47	56	66	90	60	87	0.2
Card payments	18,146	19,219	20,542	21,505	21,414	23,237	22,144	44.0
ATM withdrawals	2,467	2,462	2,454	2,375	2,332	2,191	2,178	4.3
Total	**48,248**	**48,794**	**49,757**	**49,677**	**48,817**	**51,042**	**50,308**	**100.0**

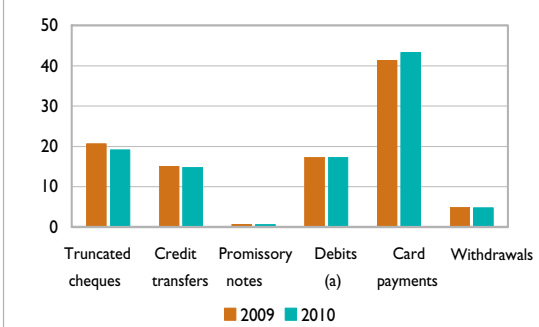
Market share developments for main non-cash means of payment

(% of amounts exchanged)



Market share developments for main non-cash means of payment

(% of volumes exchanged)



(a) Debits: direct debits, interbank payment orders and electronic payment orders.

Sources: GSIT, STET.

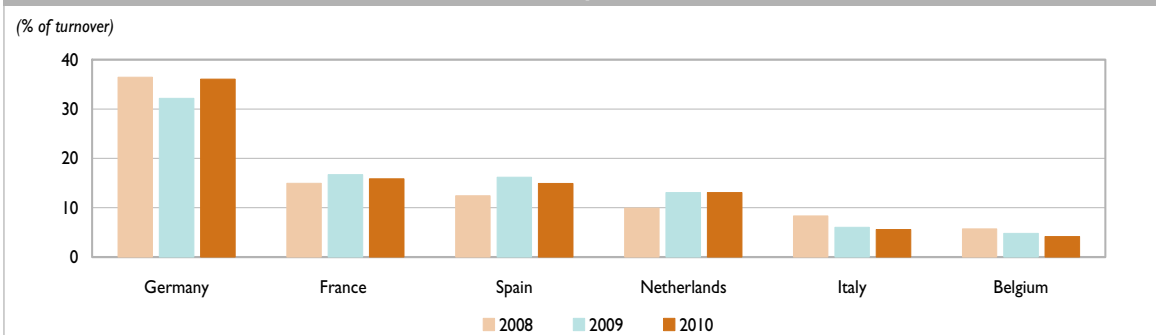
Produced 23 February 2011

Table 37
Large-value payment systems – EU

(daily average in EUR billions, % share for the last month)

	2006	2007	2008	2009	2010			2010
					Oct.	Nov.	Dec.	Share
France	530	569	398	367	358	344	372	15.9
Germany	591	711	972	707	821	824	855	36.5
Austria	31	35	59	28	21	26	25	1.0
Belgium	76	104	152	106	95	91	100	4.3
Cyprus	–	–	1	2	1	2	2	0.1
Spain	296	344	331	356	359	409	378	16.1
Finland	15	24	33	28	31	31	34	1.5
Greece	27	33	30	29	27	23	27	1.2
Ireland	26	29	32	30	29	33	27	1.2
Italy	148	165	221	133	126	127	135	5.8
Luxembourg	31	39	60	40	36	41	45	1.9
Malta	–	–	0	0	0	0	0	0.0
Netherlands (a)	100	121	264	287	256	249	262	11.2
Portugal	13	13	16	17	19	20	23	1.0
Slovakia	–	–	–	3	3	2	3	0.1
Slovenia	–	2	2	2	1	2	2	0.1
EPM-ECB	20	27	43	47	33	35	37	1.6
Total TARGET2 euro area (b)	**1,904**	**2,217**	**2,614**	**2,182**	**2,217**	**2,259**	**2,327**	**99.3**
Non-euro area	188	202	53	16	16	14	17	0.7
Total TARGET2 EU (b)	**2,092**	**2,419**	**2,667**	**2,198**	**2,233**	**2,273**	**2,343**	**100.0**
Euro1 (c)	**189**	**228**	**287**	**255**	**229**	**235**	**243**	

Maket share of each financial centre in the TARGET2 system



The sum of the components may not be equal to the total (or to 100) due to rounding.
Since January 2009, a new methodology for collecting and reporting statistics has been established on the TARGET2 data to improve data quality. This must be taken into account when comparing 2009 data with previous data.
(a) Since 19 May 2008, the operations of the United Kingdom pass in transit by this country.
(b) Variable composition according to the countries which participate in the systems of payment in euro.
(c) Euro1 (EBA): clearing system of the Euro Banking Association. Euro1 data include retail payments recorded in STEP1.

Sources: Banque de France, European Central Bank. *Produced 23 February 2011*

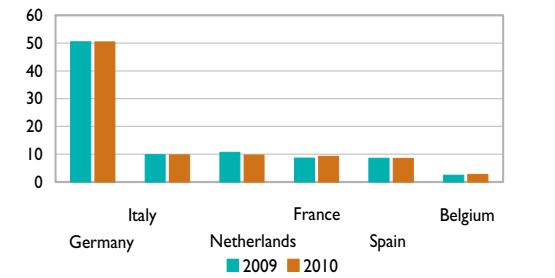
Table 38
Large-value payment systems – EU

(daily average in number of transactions, % share for the last month)

	2006	2007	2008	2009	2010			2010
					Oct.	Nov.	Dec.	Share
France	17,953	19,192	25,992	29,773	33,016	30,829	34,784	9.9
Germany	148,613	164,187	181,625	174,695	175,094	170,824	173,937	49.7
Austria	13,073	15,222	14,199	6,539	4,855	5,205	5,505	1.6
Belgium	6,802	7,993	9,884	8,517	10,380	11,951	11,097	3.2
Cyprus	–	–	392	389	466	482	509	0.1
Spain	37,439	41,792	36,167	29,580	29,511	29,531	30,809	8.8
Finland	1,223	1,392	1,587	1,652	1,573	1,583	1,563	0.4
Greece	5,951	6,334	5,117	5,692	6,776	6,410	6,969	2.0
Ireland	4,775	5,334	5,139	4,824	4,712	4,916	4,664	1.3
Italy	42,934	45,111	36,491	33,943	32,932	33,047	34,092	9.8
Luxembourg	2,631	3,399	3,037	2,847	3,246	3,171	3,395	1.0
Malta	–	–	50	59	73	72	73	0.0
Netherlands (a)	17,849	27,685	37,745	36,930	31,182	30,523	30,153	8.6
Portugal	4,190	4,774	5,072	4,191	4,191	4,254	4,381	1.3
Slovakia	–	–	–	606	613	639	640	0.2
Slovenia	–	3,152	3,018	3,073	3,085	2,980	3,183	0.9
EPM-ECB	156	169	176	312	335	338	354	0.1
Total TARGET2 euro area (b)	**303,589**	**345,738**	**365,690**	**343,621**	**342,040**	**336,754**	**346,109**	**99.0**
Non-euro area	22,607	20,442	4,277	2,364	3,736	3,546	3,553	1.0
Total TARGET2 EU (b)	**326,196**	**366,179**	**369,967**	**345,985**	**345,776**	**340,301**	**349,662**	**100.0**
Euro1 (c)	**187,163**	**211,217**	**250,766**	**227,674**	**237,212**	**230,569**	**234,427**	

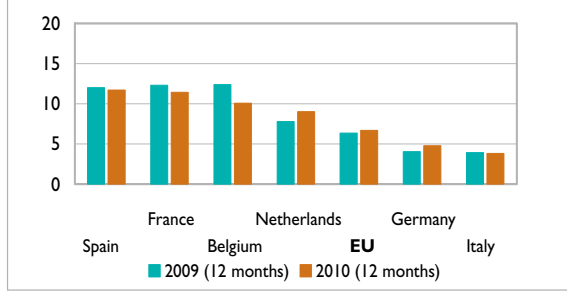
Market share of each financial centre in the TARGET2 system

(% of volumes exchanged)



Average transaction amount in the TARGET2 system

(EUR millions)



The sum of the components may not be equal to the total (or to 100) due to rounding.
Since January 2009, a new methodology for collecting and reporting statistics has been established on the TARGET2 data to improve data quality. This must be taken into account when comparing 2009 data with previous data.
(a) Since 19 May 2008, the operations of the United Kingdom pass in transit by this country.
(b) Variable composition according to the countries which participate in the systems of payment in euro.
(c) Euro1 (EBA): clearing system of the Euro Banking Association. Euro1 data include retail payments recorded in STEP1.

Sources: Banque de France, European Central Bank. *Produced 23 February 2011*

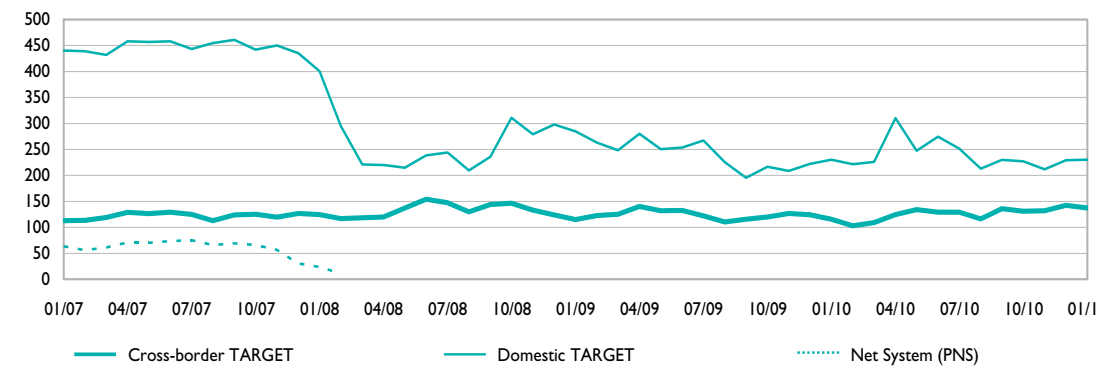
Table 39
Large-value payment systems – France

(daily average in EUR billions, % share for the last month)

	2007	2008	2009	2010	2010		2011	2011
					Nov.	Dec.	Jan.	Share
Collateral used in domestic TARGET (b)								
French negotiable securities	11.5	51.2	114.6	105.7	99.1	102.4	102.4	31.2
Private claims	18.6	79.9	129.0	149.8	153.4	155.3	155.3	47.4
Securities collateralised through CCBM	7.2	62.8	79.9	76.9	66.8	66.1	66.1	20.2
Other securities (c)	8.8	8.2	7.9	5.9	3.6	3.9	3.9	1.2
Total	**46.1**	**202.1**	**331.3**	**338.3**	**322.9**	**327.7**	**327.7**	**100.0**

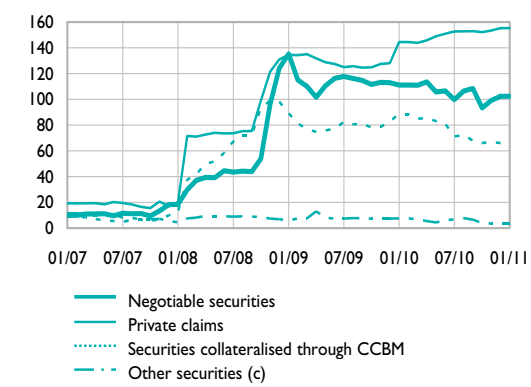
Monthly change in amounts exchanged in French payment systems (a)

(EUR billions, daily average)

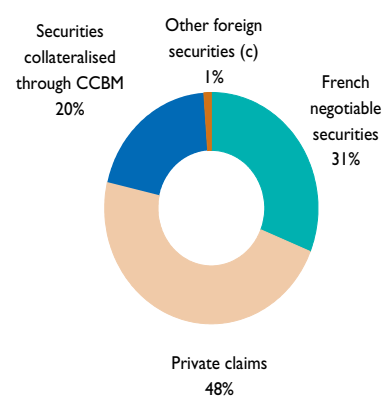


Monthly change in collateral (b)

(EUR billions, daily average)



Collateral used in January 2011 (b)



(a) Since 18 February 2008, TBF (the French component of TARGET) and PNS systems have been replaced by TARGET2-Banque de France, the single French large-value payment system.
(b) Until 15 February 2008, the indicated amounts corresponded to collateral used for intraday credit in TBF. Since the go-live of the "3G" system (Global management of collateral) and TARGET2-Banque de France on 18 February 2008, the amounts represent the collateral posted in a single pool of assets and that can be used for monetary policy and/or intraday credit operations.
(c) Other foreign securities submitted via links between securities settlement systems.

Source: Banque de France. *Produced 23 February 2011*

Published by
Banque de France
39 rue Croix des Petits-Champs
75001 Paris

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Imprint
Banque de France (SIMA)

Internet
www.banque-france.fr/gb/publications/bulletin/qsa.htm

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